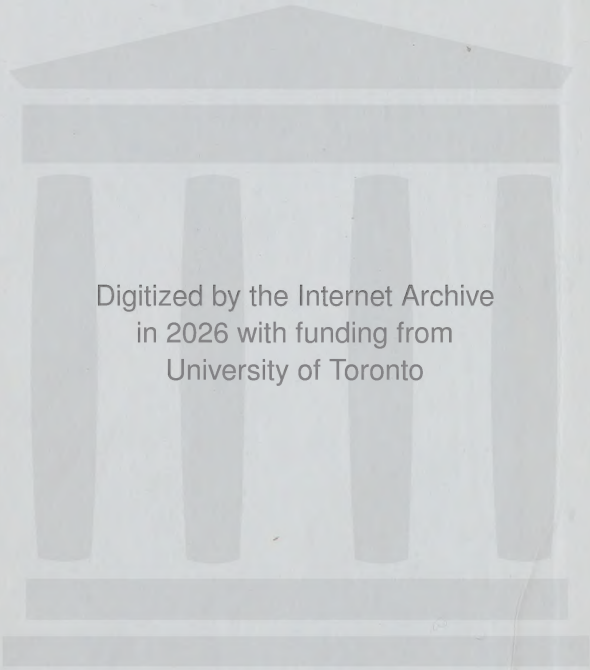
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The College of Education University of Toronto Calendar 1970-71

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The College of Education
University of Toronto
Calendar 1970–71

In view of increasing costs of supplies and labour, fees, residence dues and other charges set forth in this Calendar are subject to changes by the Board of Governors.

Enquiries concerning courses at The College of Education should be addressed to the Registrar, The College of Education, 371 Bloor Street West, Toronto 181.

University of Toronto Press 1970

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Historical Note

When secondary education in Upper Canada was officially introduced in 1807, qualifications for teachers were ill-defined and professional training was non-existent. Nevertheless, a surprising number of 'educated gentlemen' found their way into the classrooms of the District Grammar Schools. Unfortunately, the supply of these superior pedagogues failed to keep pace with the growth of the population and the subsequent increase in schools. But in spite of the difficulties encountered, no serious attempt to provide teacher training was made for more than half a century.

Beginning in 1858, a number of experiments involving model schools and training institutes was conducted with the aim of improving the academic and professional qualifications of teachers. None of these endeavours met with any widespread satisfaction.

In 1890, all such operations were abandoned with the founding of a provincial School of Pedagogy in Toronto. Seven years later, this institution was moved to Hamilton and renamed the Ontario Normal College.

In 1906, the training of secondary school teachers was modified drastically when Faculties of Education were organized at the University of Toronto and at Queen's University. In Toronto, the Faculty offered professional secondary school courses in Pedagogy. In order to improve the practical and experimental aspects of its program, the Faculty established, in 1910, a practice school, the University of Toronto Schools.

This pattern of teacher training continued until after the close of World War I. In 1920, it came to an abrupt end when the Faculty of Education at Queen's was discontinued and the Faculty at Toronto was designated as the Ontario College of Education, University of Toronto.

During the period since its inception, the Ontario College of Education has expanded its program, its services, its facilities, and has added a number of important departments: the Guidance Centre, in 1945; the Vocational and Industrial Arts Department, in 1946; the Department of Advanced Academic Recommendation (now

known as the Committee on Advanced Standing), in 1957; and the Educational Media Centre, in 1966.

In 1966, the Departments of Graduate Studies and Research were transferred to the Ontario Institute for Studies in Education, with the result that the activities of those departments are now administered by the Institute.

In 1966, a new agreement for the operation of the Ontario College of Education was made between the Minister of Education and the University of Toronto, establishing a College Council and Advisory Board. By the same agreement, the name of the College was changed to *The College of Education, University of Toronto.*

During a period of forty-five years The College was the sole institution in the province for the preparation of secondary school teachers. In 1965, the situation altered with the opening of the Althouse College of Education, The University of Western Ontario. Since then Faculties of Education have been established at Queen's University, The University of Ottawa, and Lakehead University.

Today, The College of Education pursues its traditional rôle of training secondary school teachers and, in addition, trains a number of elementary school teachers. The College also administers the University of Toronto Schools and the Guidance Centre.

Academic Calendar, One-Year Program, 1970-7

	Autumn Term, 1970 September 21 to December 18
September 21	Registration, 9 a.m.
October 5	Last date for changing optional subjects
October 12	Thanksgiving Day
November 11	Remembrance Day
December 31	Last day for accepting applications for supplemental practical test
	Winter Term, 1971 January 4 to April 8
January 20	Last day for receiving the second instalment of fees
March 22 to 26	Mid-term break
April 9	Good Friday
	Spring Term, 1971 April 13 to May 14
April 13 to May 14	Final Examinations
May 28	Start of University Commencement
June 24	Last day for accepting applications for supplemental written examinations

Academic Calendar, Summer Session, 1970

ıne 29 to July 31	Business and Commerce Summer Sessions for Intermediate Accountancy, Data Processing, Marketing and Secretarial, Parts I, II and Specialist
uly 6 to July 10	Business and Commerce, Updating Courses
ne 29 to July 31	Commercial-Vocational Five-Week Summer Session (C2)
ne 29 to July 31	Commercial-Vocational Five-Week Summer Session (C3)
ne 29 to July 31	Commercial-Vocational Completing Session (C2)
ne 29 to July 31	Commercial Second and Third Summer Sessions for Commercial-Vocational Teachers (C3)
29 to August 14	High School Assistants' Completing Seven-Week Summer Session
e 29 to August 7	High School Assistants' Summer Session for Teachers with Professional Education
e 29 to August 7	High School Assistants' Type A Summer Session
29 to August 14	Home Economics Summer Session, Intermediate, Part II
e 29 to August 7	Home Economics Summer Session, Intermediate, Parts III and IV
29 to August 14	Industrial Arts Summer Session, Elementary, Part I
ne 29 to July 31	Industrial Arts Summer Session, Elementary, Parts II and III
ne 29 to July 31	Industrial Arts Summer Session, Intermediate, Parts II and III
ne 29 to July 31	Industrial Arts Summer Session, Specialist, Parts I, II and III
29 to August 14	Occupational, Type B (Practical Subjects), Professional Program Summer Session, Initial and Completing
e 29 to August 7	Occupational, Type B (Practical Subjects), Trades Program Summer Session, Parts I and II
ne 29 to July 31	Occupational, Type A (Practical Subjects), Summer Session, Parts I and II
July 6 to July 31	Outdoor Education Course
e 29 to August 7	Physical and Health Education (Women) Summer Session, Intermediate, Parts I and II
e 29 to August 7	Physical and Health Education (Women) Summer Session, Specialist
e 29 to August 7	Physical and Health Education (Men) Summer Session, Intermediate, Parts I and II
e 29 to August 7	Physical and Health Education (Men) Summer Session, Specialist
e 29 to August 7	Physical and Health Education Special Summer Session for Teachers of Physical Education for Girls
e 29 to August 7	School Librarianship Summer Session, Specialist
29 to August 14	Vocational, Type B, Summer Session, Initial and Completing
29 to August 14	Vocational, Type B, Summer Session, for holders of High School Assistant's Type B Certificates
ıne 29 to July 31	Vocational, Type A, Summer Session, Parts I and II

University Administrative Officers 1969-70

President	C. T. Bissell, M.A., PH.D., D. ès L., D.LITT., LL.D., F.R.S.C
Assistant to the President	N. S. C. Dickinson, C.D., B.A.
Executive Vice-President (Academic) and Provost	J. H. Sword, M.A.
Vice-Provost and Executive Assistant to the President	D .F. Forster, B.A., A.M.
Executive Vice-President (Non-Academic)	A. G. Rankin, B.COM., F.C.A.
Executive Assistant to the Executive Vice-President (Non-Academic)	J. F. Brook
Vice-President (Administration)	F. R. Stone, B.COM., F.C.A.
Secretary of the Board of Governors	D. S. Claringbold
Director of Administrative Services	M. A. Malcolm, B.A.
Director of Physical Plant	F. J. Hastie, B.SC., P.ENG.
Director of Finance	(to be appointed)
Vice-President (Health Sciences)	J. D. Hamilton, M.D., F.R.C.P.(C.)
Vice-President (Research Administration)	G. de B. Robinson, M.B.E., B.A., PH.D., F.R.S.C.
Director of the Office of Research Administration	Miss S. Dymond, B.A., Q.C.
Vice-President and Registrar and Secretary of the Senate	R. Ross, M.B.E., M.A.
Executive Assistant to the Vice-President and Registrar and Assistant Secretary of the Senate	W. Kent, M.A.
Vice-President and Graduate Dean	E. Sirluck, M.B.E., M.A., PH.D., LL.D., F.R.S.C.
Chief Librarian	R. H. Blackburn, M.A., B.L.S., M.S., LL.D.
Director of University Extension	G. H. Boyes, M.A.

Director of Admissions	E. M. Davidson, B.A.
Director of Student Awards	Miss H. L. Reimer, B.A., B.PED.
econdary School Liaison Officer	W. A. Hill
irector of Statistics and Records	J. M. Tusiewicz, M.A.SC., M.B.A.
Director of University Health Service	G. E. Wodehouse, M.C., M.D., F.R.C.P.(C.), M.R.C.P.
Assistant Director of University Health Service – Women	Miss F. H. Stewart, B.A., M.D.
rector of Career Counselling and Placement Centre	A. W. Headrick, M.A.
Director of International Student Centre	Mrs. K. Riddell, B.A.
Director of the Advisory Bureau	D. J. McCulloch, B.A., M.D., D.PSYCH., F.R.C.P.(C.)
Director of Housing Service	Mrs. M. G. Jaffary, B.A.
Director of University of Toronto Press	M. Jeanneret, B.A., LL.D.
Director of Information	K. S. Edey
Director of Alumni Affairs	J. C. Evans, B.A.
Director of Development	R. L. Jones
Warden of Hart House	E. A. Wilkinson, B.A.
Director of Athletics and Physical Education – Men	W. A. Stevens, B.S.
Director of Athletics and Physical Education – Women	Miss A. Hewett, B.ED., P.E.

The College of Education Administrative Staff 1970-71

Dean	D. F. Dadson, B.A., B.ED.
Assistant Dean	H. O. Barrett, C.D., B.A., D.PAED., F.O.T.F.
Director of the Department of Technical and Industrial Arts	A. W. Frizzell, B.A.SC., P.ENG.
Assistant Directors of the Department of Technical and Industrial Arts	F. E. Mason, B.A. T. H. G. Luther, M.A., B.ED.
Director of the Department of Business and Commerce	A. P. Seggie, B.A.
Director of Practice Teaching	J. W. Dodd, B.A.
Assistant Directors of Practice Teaching	W. G. London, B.A. R. Cairns, B.A.
Associate Director of Practice Teaching (Technical and Industrial Arts)	D. J. Long, B.A.
Director of the Guidance Centre	C. L. Bedal, B.A., M.ED.
Director, Committee on Advanced Standing	J. S. Carlisle, B.A., B.PAED.
Librarian	Miss M. Shortt, B.A., M.L.S.
Registrar	Miss A. A. L. Elliott, B.A.
Assistant Registrar	G. A. Whyte, B.A., B.J.
Nurse	Mrs. K. O. May, B.A., B.S., R.N.
Office Manager and Administrative Assistant	G. Mitchell

Teaching Staff 1970-71
High School Assistants' Program

Administration and Program Development

Professor A. S. Nease, M.A., F.C.C.T.
Professor J. W. Greig, B.A., ED.D.
sociate Professor V. K. Gilbert, B.SC., M.ED.
Lecturer K. M. Marjoribanks, B.SC., B.A., M.ED.
Lecturer J. D. Wood, M.A., A.R.C.T.

Art

Professor P. H. Taçon, B.A., B.PAED., M.A.

Business and Commerce

Professor A. P. Seggie, B.A.
sociate Professor J. H. Dool, B.A.
sociate Professor G. A. Reid, B.COM., B.ED., M.A., F.C.C.T.
sociate Professor R. B. Wilson, B.COM.
ssistant Professor B. E. Conchie, B.A.
ssistant Professor D. W. Garth, B.COM.

Computer Studies

sociate Professor L. J. La Fave, B.ED., M.B.A.
sociate Professor C. C. Brodeur, M.A., PH.D.
ssistant Professor G. D. Milbrandt, B.S.ED.

Classics

Professor B. C. Taylor, M.A.
Lecturer K. E. Prentice, M.A.

Economics and Political Science

ssistant Professor J. D. Thexton, M.A.

Educational Media

Professor D. A. Clee, B.A., M.SC., F.R.G.S.
Lecturer Miss E. Crampton, L.U.D., C.S.T.D., I.P.C.

Educational Psychology

Professor H. O. Barrett, C.D., B.A., D.PAED., F.O.T.F.
ssociate Professor C. C. Brodeur, M.A., PH.D.
ssociate Professor R. W. Dent, M.A., PH.D.

Associate Professor	S. L. Kong, B.A., M.ED., PH.D.
Associate Professor	W. V. Trott, M.A.
Assistant Professor	Mrs. Conchita Tan-Willman, B.S.E., M.A., PH.D.
Assistant Professor	A. J. Zimmerman, B.A., M.ED.

Elementary Education

Professor	G. E. Tait, B.A., B.PAED., ED.D.

ENGLISH DEPARTMENT

Associate Professor	Mrs. Johan Aitken, M.A.
Assistant Professor	A. A. Bowers, B.A.

GEOGRAPHY DEPARTMENT

Associate Professor	W. E. Sager, C.D., B.A., F.A.G.S.
Associate Professor	A. Balins, M.A.
Associate Professor	Mrs. Una Elliott, B.A., M.A., B.ED.

MATHEMATICS DEPARTMENT

Professor	W. B. MacLean, B.A., M.A.
Associate Professor	D. L. Mumford, B.A.
Assistant Professor	D. W. Alexander, B.A., B.ED.
Assistant Professor	F. Ebos, B.SC., M.SC.
Assistant Professor	D. L. Fraser, B.SC., B.ED.
Assistant Professor	H. L. Ridge, B.SC.

MUSIC DEPARTMENT

Assistant Professor	Mrs. Natalie Kuzmich, MUS.BAC., M.A.

PHYSICAL AND HEALTH EDUCATION DEPARTMENT

Professor	J. H. Passmore, B.A., B.P.H.E., B.ED.
Associate Professor	J. R. Life, B.P.H.E., M.ED.

SCIENCE DEPARTMENT

Associate Professor	W. A. Andrews, M.SC., B.ED.
Associate Professor	R. G. Casson, B.SC.
Associate Professor	H. M. Lang, B.A.
Assistant Professor	T. J. E. Wolfe, B.S.A.
Lecturer	J. F. Eix, B.SC.

TECHNICAL AND INDUSTRIAL ARTS DEPARTMENT

Associate Professor	W. S. Sloan, B.A., A.O.C.A.

English

Professor	R. J. McMaster, B.A., B.ED.
Professor	J. H. Stevens, M.A.
Associate Professor	Mrs. Johan Aitken, M.A.
Associate Professor	A. C. Coman, M.A.
Associate Professor	J. W. MacDonald, M.A., ED.D.
Associate Professor	R. T. Shephard, B.A.

ssistant Professor A. A. Bowers, B.A.
ssistant Professor Miss Joan Laird, B.A.
ssistant Professor K. J. Weber, B.A.

Geography

ssociate Professor W. E. Sager, C.D., B.A., F.A.G.S.
ssociate Professor R. P. Baine, M.A.
ssociate Professor A. Balins, M.A.
ssociate Professor Mrs. Una Elliott, B.A., M.A., B.ED.

Guidance

ssociate Professor C. L. Bedal, B.A., M.ED.
ssistant Professor B. R. Eardley, B.S., M.ED.
ssistant Professor P. A. Manuel, B.A., M.ED.

History

Professor J. C. Ricker, M.A.
Professor A. D. Lockhart, M.A.
ssociate Professor R. W. P. Bowles, M.A.
ssociate Professor J. E. Cruickshank, M.A.
ssociate Professor G. Smith, M.A.
ssistant Professor L. R. Hill, M.A.
Assistant Professor G. A. Whyte, B.A., B.J.

History, Philosophy, Sociology of Education

Professor J. M. Paton, M.A., D.PAED., F.C.C.T.
Professor A. F. Skinner, M.A., B.SC., PH.D., F.E.I.S.
ssociate Professor G. W. Bancroft, B.A., M.ED., PH.D.
ssistant Professor T. W. Goodenough, B.A., M.A.
ssistant Professor D. A. MacIver, B.A., M.ED., DIP.ED.
ssistant Professor L. Stott, B.ED.

Home Economics

ssociate Professor Miss Helen Finnegan, B.A., M.S.
ssistant Professor Miss Audrey Warner, B.A., M.SC.
ssistant Professor Miss Annette Yeager, B.H.SC., M.ED.

Industrial Arts

Assistant Professor R. Sramek, B.A.

Mathematics

Professor W. B. MacLean, B.A., M.A.
Professor K. O. May, A.B., M.A., PH.D.
Professor W. W. Sawyer, B.A., M.A.
ssociate Professor D. L. Mumford, B.A.
Assistant Professor D. W. Alexander, B.A., B.ED.
Assistant Professor F. Ebos, B.SC., M.SC.
Assistant Professor D. L. Fraser, B.SC., B.ED.
Assistant Professor H. L. Ridge, B.SC.

Modern Languages

Associate Professor	R. J. Jones, B.A., MUS.BAC., A.R.C.T.
Associate Professor	G. A. Kirk, M.A., DIP.D'E.
Associate Professor	R. R. A. Roy, B.A., B.PHIL., M.A.
Associate Professor	C. R. Theodore, M.A.
Assistant Professor	H. Hainsworth, M.A.
Lecturer	E. F. James, M.A.
Special Lecturer in Spanish	A. M. Gordon, A.M., PH.D.
Special Lecturer in Italian	Mrs. M. Kuitunen, DOTT. IN LETT., M.A., PHIL.M.
Special Lecturer in Russian and German	Mrs. G. J. Leech, DOC.PHIL.
Special Lecturer in French	Mme. M. Léon, L. ès L., D.E.S.
Special Lecturer in French	H. G. Schogt, M.A., PH.D.

Music

Assistant Professor	Mrs. Natalie Kuzmich, MUS.BAC., M.A.

Physical and Health Education

Professor	J. H. Passmore, B.A., B.P.H.E., B.ED.
Associate Professor	J. R. Life, B.P.H.E., M.ED.
Associate Professor	Miss Jean M. Stirling, B.A., DIP.P.H.E.
Assistant Professor	Mrs. Janet Armstrong, M.A.
Assistant Professor	D. F. Fawcett, B.P.H.E., M.A.
Assistant Professor	R. C. Goode, M.A., B.P.H.E., PH.D.

Psychology and Sociology

Professor	H. O. Barrett, C.D., B.A., D.PAED., F.O.T.F.

School Librarianship

Associate Professor	Miss Margaret Scott, B.A., B.L.S.
Assistant Professor	Miss Fay Blostein, B.A., B.L.S.

Science

Professor	A. H. Louden, B.A., B.PAED.
Associate Professor	R. G. Casson, B.SC.
Associate Professor	W. A. Andrews, M.SC., B.ED.
Associate Professor	H. M. Lang, B.A.
Assistant Professor	T. J. E. Wolfe, B.S.A.
Lecturer	J. F. Eix, B.SC.

Theatre Arts

Associate Professor	J. C. W. Saxton, B.A., M.A.(OXON.)
Assistant Professor	G. D. Wagner, B.A.

Teaching Staff 1970-71
Technical and Industrial Arts Program

Administration and Program Development

Professor A. S. Nease, M.A., F.C.C.T.
Professor J. W. Greig, B.A., ED.D.

Art

Professor P. H. Taçon, B.A., B.PAED., M.A.

Educational Psychology

ssociate Professor T. H. G. Luther, B.A., B.ED., M.A.

English

ssociate Professor C. H. Wall, B.A., B.ED., M.A.
ssistant Professor G. R. Burfield, B.A.

History of Vocational Education

ssistant Professor I. T. Malloch, B.A.

Home Economics

ssociate Professor Miss Helen Finnegan, B.A., M.S.

Industrial Arts

ssociate Professor T. H. G. Luther, B.A., B.ED., M.A.
ssociate Professor E. P. Emerson, B.A., M.ED.
ssociate Professor W. S. Sloan, B.A., A.O.C.A
ssociate Professor R. W. Wilson, B.SC., M.I.E.E.
ssistant Professor R. Sramek, B.A.
Lecturer P. J. Briggs
Lecturer J. G. A. Jameson
Lecturer C. Otto, B.A.

Mathematics

ssistant Professor D. W. Alexander, B.A., B.ED.

Principles of Teaching

Professor A. W. Frizzell, B.A.SC., P.ENG.
Professor F. E. Mason, B.A.
ssociate Professor D. J. Long, B.A.

Assistant Professor	A. Gaydos, B.A., M.ED.
Assistant Professor	I. T. Malloch, B.A.
Assistant Professor	W. J. Watson, B.A.
Lecturer	H. J. Taylor, B.A.

Technical Subjects

Associate Professor	D. J. Long, B.A.
Assistant Professor	W. J. Watson, B.A.
Lecturer	C. Otto, B.A.
Lecturer	H. J. Taylor, B.A.

Technical Proficiency Examinations

Director	E. Gascoigne, P.ENG.

Staff of The University of Toronto Schools 1970-71

Headmaster	W. B. MacMurray, B.A., B.PAED.
Assistant Headmaster	C. D. S. Bate, B.A.SC., M.ED.
Art	D. F. Boutros, B.A.
Classics	E. J. Collins, B.A., B.PAED.
	H. C. Maynard, B.A.
	K. E. Prentice, M.A.
English	S. H. Bull, M.A.
	H. D. Gutteridge, M.A.
	W. R. H. Montgomery, M.A., PH.D.
	C. W. Weir, M.A.
Guidance	E. J. Collins, B.A., B.PAED.
History	D. A. Kearn, B.A., B.ED. (on leave of absence)
	R. J. Stewart, B.A.
Mathematics	G. A. Fleming, B.A., M.ED.
	N. D. Fox, B.COM.
	J. A. Vanstone, B.A.
odern Languages	P. F. L. Gallant, B.A.
	F. W. Ignatz, B.A.
	R. J. Moorfield, B.A.
	W. A. Stickland, B.A.
Music	G. F. FitzGerald
Physical and Health Education	W. M. Simons, B.P.H.E., DIP.P.E.
	J. Stulac, B.P.H.E., B.A.
Science	C. E. B. LeGresley, B.A.
	F. M. Speed, B.SC., B.SC.S., B.ED.
Librarian	L. H. Newell, B.A.
ssistant Librarian	J. F. Teerkott, B.A.

General Information

1. Location of The College of Education

The College of Education is located at the corner of Bloor Street West and Spadina Avenue, in the northwest sector of the St. George Campus, University of Toronto. Mailing address of the College is 371 Bloor Street West, Toronto 181.

2. Function of The College of Education

The basic function of The College of Education is the training of teachers for professional service in elementary and secondary schools, especially in the schools of Ontario. Programs of The College provide courses leading to *basic certificates* required for teaching in the high schools, collegiate institutes, vocational schools and elementary schools of Ontario. Other College courses lead to *additional certificates* in areas of subject specialization. The College itself does not grant teaching certificates. These are issued by the Ontario Department of Education on the recommendation of The Council of The College. With the exception of skilled tradesmen and some others taking Vocational courses, students in The College of Education are required to hold acceptable university degrees.

lege Facilities

The College of Education is equipped with classrooms, lecture rooms, library, laboratories and gymnasia, an Educational Media Centre with a television studio and mobile television unit, language laboratories, a theatre studio, a data processing centre and a typing laboratory.

4. The College Library

Students will find in the Library a major collection of books and periodicals on all aspects of secondary and elementary education, as well as small working collections on the various subjects taught in Ontario schools. In addition to its loan facilities, the Library provides a reference service to assist students in locating information on teaching methods, educational psychology and school management, and to familiarize them with the chief sources in Canada and elsewhere from which material on education may be obtained.

The Library's selected collection of mounted pictures, filmstrips, film loops, slides, recordings and document kits is available to the students for use both in demonstration lessons at The College and in their practice teaching assignments at outside schools. Facilities for previewing these teaching aids are provided in the Library.

Students at The College are entitled to use the main University of Toronto Library, where they can obtain extensive material on subjects other than education.

5. University Facilities

Students registered for courses in The College of Education may use the University's athletic facilities, and Hart House, under such conditions as obtain with other students. They will also be admitted to the Royal Ontario Museum, 100 Queen's Park, and to the Toronto Art Gallery, Dundas Street, from 9 a.m. to 5 p.m., on presentation of their Admit to Lecture cards.

6. Health Centre

The Health Centre, in charge of a registered nurse, offers to students first aid, counsel with health problems, and referrals to doctor, dentist, or hospital as appropriate. The Centre is open each week during the session, Monday through Friday, from 8.30 a.m. to 4 p.m.

7. The University Health Service

Any student may consult a staff physician at the Health Service 9 a.m. to 5 p.m., Monday to Friday, and 9 a.m. to 12.30 p.m. (Men) and 12 noon (Women) Saturday, while the University is in session. The University does not accept any responsibility for injuries sustained by students while engaged in Physical Education classes or in University athletic activities, but through the Health Service provides for treatment within the following limits: minor injuries are treated at its offices; treatment for more serious injuries will be provided if such treatment is given under the direction and care of staff retained by the Health Service. Treatment is limited to students who suffer accidents while engaged in and which arise out of University Physical Education classes and athletic activities.
Health Service (Men), 256 Huron Street, 928-2459
Health Service (Women), 256 Huron Street, 928-2456

8. Housing Service

The University of Toronto maintains a listing of rooming houses, flats, apartments and homes. Information on these may be obtained through the Housing Service office at 49 St. George Street, Toronto 181.
Off-campus housing of this nature is not subject to University regulation, but every effort is taken to make the information as complete as possible. Students are encouraged to assist in this effort by reporting on the quality of the accommodation they have occupied.
A limited amount of accommodation is offered in exchange for part-time services such as housekeeping or babysitting.

9. St. Andrew's University Day Nursery

This day nursery, established and supported by the University of Toronto, the Graduate Students' Union and the Students' Administrative Council, provides pre-school education and day care

facilities for children of University of Toronto students. Children aged two to five years are accepted.

The nursery, located at St. Andrew's United Church, 117 Bloor Street East, is well equipped and staffed, and is licensed under the Day Nursery Act, Province of Ontario. It operates from 8.30 a.m. to 5.45 p.m. throughout the winter and summer academic sessions. Fees are reasonable, and noon meals and morning and afternoon snacks are provided. Information may be obtained from the nursery (telephone 921-7078) or from the School of Graduate Studies.

. University of ronto Schools

The University of Toronto Schools, established in 1910 as a division of The College of Education, is a day school for boys from Grades 7 to 13. The normal enrolment is 420 students selected by competitive examinations from among a large number of applicants. Each year classes are admitted to Grades 7 and 9 respectively to replace the class graduating from Grade 13. The Ontario curriculum leading to university entrance is provided, with opportunities for enrichment, acceleration, independent study, and experimentation. The annual tuition fee is $300.00. The resources of the school are available to staff and students of The College for teaching practice, demonstration, and experiment.

11. Tuition and Other Fees

Fees for the High School Assistants' Program and Technical and Industrial Arts Programs of the One-Year Session:

Academic Fee	Men $200	Women $200
Incidental Fees	Men $ 57	Women $ 32
Total Fees (if paid in one instalment)	Men $257	Women $232
First Term Instalment, due October 1	Men $157	Women $132
Second Term Instalment, due January 20	Men $103	Women $103

NOTES:

1 The Academic Fee (which includes the examination and University Library fees) and the Incidental Fees are to be paid to the *University of Toronto* according to instructions on the *Fees Form* obtained from the Registrar.

2 The fee for students attending the Session after Christmas is $100 plus Incidental Fees.

3 Incidental Fees include the following:

For Men – Hart House; Students' Administrative Council; Athletic; Health Service; and such medical examinations as may be required for admission to The College.

For Women – Students' Administrative Council; Athletic; Health Service; and such medical examinations as may be required for admission to The College.

4 An additional charge of $3 is made for payment of fees in two instalments.

5 After January 20, an additional deferred payment fee of $3 per month shall be imposed until the whole amount has been paid.

6 There is no additional fee for the High School Assistants' Program, Type A, or for courses leading to additional certificates when taken concurrently with the High School Assistants' Program Type B.

7 Admission acceptances sent out on June 1, 1970, or earlier, must be confirmed in writing by the applicant to the Registrar of The College of Education by June 15, 1970, accompanied by a non-refundable deposit of $25.00 payable to the University of Toronto by certified cheque or money order. This deposit will be applied to the applicant's academic fee.

For Supplemental Examinations:	
Fee for each supplemental examination in one subject of any course, except High School Assistants', Type A	$ 10
Fee for the supplemental examination(s) for any High School Assistant's Type A Certificate	$ 20
For Summer Sessions:	
High School Assistants' Completing Summer Session	$120
Completing Summer Session, Special Student, each subject	$ 50
Summer Session for Teachers with Professional Education	$155
Type A Seminars, Summer Session	$100
Business and Commerce Summer Sessions:	
Intermediate, Parts I and II, each	$ 75
Specialist	$ 75
Commercial-Vocational, each	$ 75
Commercial Examinations, per subject	$ 10
Intermediate Home Economics Summer Sessions:	
Intermediate, Parts II, III and IV, each	$ 75
Industrial Arts Summer Sessions:	
Elementary, Parts I, II and III	$ 75
Intermediate, Parts I, II and III, each	$ 75
Specialist, Parts I, II and III, each	$ 75
Vocational and Occupational Summer Sessions:	
Type B for holders of H.S.A., Type B, Certificates	$100
Type B, Parts I and II, each	$150
Type A, Parts I and II, each	$ 75
Occupational Trades, Two-week Sessions, each	$ 25

School Librarianship Summer Session:	
Specialist	$100
Physical and Health Education Summer Sessions:	
Intermediate Parts I and II (Men and Women), each	$ 75
Specialist (Men and Women), each	$100
Special Course for Teachers of Physical Education for Girls	$ 75

An extra fee may be charged for an Outdoor Education Course, taken in conjunction with a Physical and Health Education Course.

NOTES:

The Incidental Fees required of students in the One-Year Program shall not be required of students in the Summer Session.

A candidate who applies after the last date for application to any course listed in this Calendar will be assessed a late fee of $20 if the candidate is admitted to the course.

A candidate who withdraws before the end of his course will be charged fees in proportion to the period of his attendance, i.e. up to the date of notice of his withdrawal.

2. Language and Medical Regulations

Facility in English. For a candidate whose first language is other than English a requirement for admission will be a Communication Test for Teaching in the English Language. The test will be conducted by a Committee composed of representatives of the Ontario Secondary School Teachers' Federation, the Department of English of the University of Toronto, and The Council of The College. Arrangements for the test will be made by the Registrar's Office, The College of Education.

The College is prepared to consider other evidence that may be submitted to the Registrar for evaluation.

Physical Unfitness of Candidates. On the Dean's report to the Minister of Education as to the physical unfitness of a student for training as a teacher, the Minister may require a special medical examination of such student, and, as a result thereof, may direct that he be not eligible for recommendation for a departmental certificate.

Student Affairs

The Student Union of The College of Education

The members of the student body of The College of Education are drawn from most of the colleges and universities located across Canada. In addition, many students come from American and European universities.

The Union's functions embrace many facets of life about The College – musical, dramatic, journalistic, social, athletic, and extra-curricular. Of prime importance is the fact that members of the Union are represented on The Council of The College and its Committees.

14. One-Year Programs Offered in 1970-71

The College will offer One-Year Programs leading to the followi Department of Education Certificates, as well as to the Bachel of Education Degree:

1 Interim High School Assistant's, Type B (See Sections 24–29)
2 Interim High School Assistant's, Type A (See Sections 31–34)
3 Art (See Sections 36–38)
4 Business and Commerce (See Sections 33–38)
5 Elementary School (See Sections 40–42)
6 Guidance (See Sections 36–38)
7 Home Economics (See Sections 36–38)
8 Industrial Arts (for High School Assistants) (See Sections 36–38, 89–92)
9 Industrial Arts (Intermediate and Specialist) (See Sections 89–9
10 Music (See Sections 36–38)
11 Occupational, Type B (Practical Subjects) (See Sections 74–75)
12 Occupational, Type A (Practical Subjects) (See Sections 74, 75, 78)
13 Physical and Health Education (See Sections 36–38)
14 School Librarianship (See Sections 36–38)
15 Theatre Arts (See Sections 36–38)
16 Vocational, Type B (See Sections 73–78)
17 Vocational, Type A (See Sections 73, 75, 78)
18 Vocational Home Economics (See Section 77)

NOTE:
Details of courses included in the High School Assistants' Program and Programs for Additional Certificates are found in Section 44–71. Details of courses included in Technical and Industrial Art Programs are found in Sections 80–97.

15. Summary of Secondary School Certificates

Listed below are the teaching certificates required for variou purposes in the secondary schools of Ontario.

Certificate	*Subjects Taught by Certificate Holders*
Interim High School Assistant's Certificate, Type B	Academic and General Subjects
Interim High School Assistant's Certificate, Type A	Academic and General Subjects
Interim Vocational Certificate, Type B	The Vocational Subject named on the Certificate
Interim Vocational Certificate, Type A	The Vocational Subject named on the Certificate
Interim Occupational Certificate, Type B (Practical Subjects)	Occupational (Practical Subjects)
Interim Occupational Certificate, Type A (Practical Subjects)	Occupational (Practical Subjects)

Interim Intermediate Industrial Arts Certificate	Industrial Arts Subjects
Specialist Industrial Arts Certificate	Industrial Arts Subjects
Interim Intermediate Certificate in Accountancy, Data Processing, Marketing, or Secretarial	Business and Commercial Subjects
Interim Specialist Certificate in Accountancy, Data Processing, Marketing, or Secretarial	Business and Commerce Subjects
Interim Commercial-Vocational Certificate, Type B (Commercial Subjects named)	Business and Commerce Subjects

NOTE:
1 For *additional certificates*, see Sections 36–38.
2 For *Elementary School Teacher's Certificate*, see Section 40.

16. Interim and Permanent Certificates

Any Department of Education certificate, when first awarded, is an interim certificate made permanent after a period of successful teaching as defined in regulations of the Department.

Interchange of tario Teaching Certificates, lementary and Secondary

1 The holder of a Permanent Elementary School Teacher's Certificate, Standard 4, may, upon accepting a contract from a board to teach in a secondary school, be granted an Interim High School Assistant's Certificate, Type B.

2 The holder of a Permanent High School Assistant's Certificate may, upon accepting a contract from a board to teach in an elementary school, be granted an Interim Elementary School Teacher's Certificate, Standard 4.

3 The holder of a Permanent High School Assistant's Certificate, who meets the Department of Education requirements for Vocational Certification, may, upon accepting a contract from a board to teach a Vocational Technical course of a secondary school, be recommended for an Interim Vocational Certificate, Type B, upon successful completion of one seven-week summer session.

4 The holder of a Permanent Vocational Certificate, a Permanent Occupational Certificate (Practical Subjects) or a Permanent Commercial-Vocational Certificate, who has a university degree acceptable for admission to the Type B course at a College of Education, may, upon receiving an assignment to teach the academic classes of a secondary school, be granted an Interim High School Assistant's Certificate, Type B.

5 It is expected that most transfers referred to in (1) and (2)

above will take place in the case of teachers teaching in the general range of Grades 7 to 10. Persons transferring to teach in grades beyond this range are advised to take summer courses which will help them to adjust to the new duties.

NOTE:

The above information regarding interchange of Certificates is found in the Department of Education's Circular 43.

18. Endorsement of the High School Assistant's Certificate, Type B

The holder of a High School Assistant's Certificate, Type B, may have his certificate *endorsed* under the following conditions:

A candidate who has obtained second class standing or better in an approved university course to a total of 15 credits in one secondary school academic subject, or 24 credits (12 credits in each) in two related academic subjects, and who completes a year of successful teaching subsequent to the date of his Type B Certificate in such subject(s) is eligible for endorsement of his Type B Certificate.

The candidate must apply to the *Committee on Advanced Standing*, The College of Education, University of Toronto, for approval of his credits and subsequently to the appropriate Area or Municipal Superintendent, for endorsement.

19. Committee on Advanced Standing

The Committee on Advanced Standing gives rulings on academic standing to candidates who are seeking endorsement of the High School Assistant's Certificate, Type B, or who are applying for admission to a course leading to a High School Assistant's Certificate, Type A.

Written enquiries should be addressed to the Director, Committee on Advanced Standing, The College of Education, 371 Bloor Street West, Toronto 181.

20. Letter of Standing, Secondary School

A Letter of Standing entitling the holder to teach in an Ontario secondary school for one year will be granted by the Minister of Education to a university graduate from any country who can meet the following conditions:

1 that his university transcripts indicate that the holder has met the academic requirements applicable to Ontario graduates;

2 that his professional training fulfils the requirements of the Ontario Department of Education;

3 that a candidate from outside Canada may be required to meet the Special Committee in the Department of Education;

4 that he is either a Canadian citizen or has landed immigrant status, or has applied for Canadian citizenship.

An application for a Letter of Standing must be forwarded to: The Registrar, Ontario Department of Education, 1 St. Clair Avenue West, Toronto 195.

On the statement of the Principal that the candidate has taught

successfully for one year under the authority of a Letter of Standing, he may be recommended by the Area or Municipal Superintendent concerned for the Interim High School Assistant's Certificate, Type B.

The Bachelor of ıcation Degree: Program for Graduates awarded the High School Assistant's rtificate Prior to May, 1970

Commencing May, 1970, graduates of the One-Year Program leading to the High School Assistant's Certificate, Type B, will be recommended also for the Bachelor of Education Degree. The program leading to the Bachelor of Education Degree for those holders of the High School Assistant's Certificate who were awarded the Certificate prior to May, 1970, is described in Section 72, page 69.

2. Supplemental Examinations and Appeals

No candidate will be permitted to take more than twice any final examination, or part thereof, for any certificate listed in this Calendar, except by permission of The Council of The College.

The answer papers of the final examinations of all unsuccessful candidates for provincial certificates are re-read by the examiners and the results of the first reading reconsidered before a decision to reject is reached. Despite this fact, any unsuccessful candidate for an interim certificate may have his case considered a third time if, before the end of the calendar year, he lodges with The Council of The College his appeal, with a statement of the grounds on which it is based, and with a fee of $10 in the form of a certified cheque or money order payable to the University of Toronto. The fee will be refunded if the appeal is sustained.

One-Year Program leading to the Bachelor of Education Degree and to the Interim High School Assistant's Certificate, Type B

23. Bachelor of ıcation Degree

The Degree of Bachelor of Education will be awarded to students on successful completion of the One-Year Program which leads also to the Interim High School Assistant's Certificate, Type B, awarded by the Ontario Department of Education.

24. The Type B Certificate

The Ontario High School Assistant's Certificate, Type B, is awarded by the Ontario Department of Education, and qualifies the holder to teach academic and general subjects in the secondary schools of Ontario. The Interim Certificate may become a Permanent High School Assistant's Certificate upon completion of two years' successful teaching experience in a secondary school in Ontario.

25. Admission Requirements

The basic requirement for admission to the program leading to the Bachelor of Education Degree, awarded by the University of Toronto, and to the Interim High School Assistant's Certificate, awarded by the Ontario Department of Education, is an approved university degree from an accredited university.

The candidate's university degree program must include at least 45 credits in Arts, Science or Commerce subsequent to Grade 13 (or equivalent).

The definition of credit is derived from the basic assumption that there are approximately 60 credits in a four-year course. From this it follows that 15 credits is equivalent to a university year; and a credit may be defined as one-fifteenth of a university year.

In general, then, one university course equals three credits.

An applicant for admission to the Program for a High School Assistant's Certificate, Type B, shall make application not later than June 1, to the Registrar, The College of Education, on an official form to be obtained from the Registrar. With the completed application form, the following must be submitted:

1 *A certificate of birth.* If not born in Canada, the candidate must submit a certificate from a competent authority that the candidate is a Canadian citizen, or has landed immigrant status, or has applied for Canadian citizenship. An applicant must be at least 20 years of age before October 1 of the year in which he applies for admission.

2 *An official transcript in duplicate* showing proof of graduation as

a Bachelor of Arts, Bachelor of Science, Bachelor of Commerce Bachelor of Applied Science, Bachelor of Household Science Bachelor of Music, or Bachelor of Physical and Health Education or other acceptable degree from a university, after a universit course approved as to admission requirements and as to content o the undergraduate courses.

A candidate for admission to The College of Education is require to produce evidence of a negative tuberculin test reading or ches x-ray taken within the preceding year.

Admission acceptances sent out on June 1, 1970, or earlier, must b confirmed in writing by the applicant to the Registrar of The Colleg of Education by June 15, 1970, accompanied by a non-refundabl deposit of $25.00 payable to the University of Toronto by certifie cheque or money order. This deposit will be applied to the applicant' academic fee.

Limitation on Enrolment, 1970–71 In the 1970–71 One-Yea program leading to the Bachelor of Education Degree, enrolmen will be limited to 1300 students. Among applicants who have ful filled the admission requirements by June 1, 1970, preference wil be given to applicants with superior academic qualifications i teaching subjects for which there is a shortage of qualified teacher in Ontario secondary schools. It is expected that it will be possibl to notify an applicant shortly after June 1, 1970, whether or not a place has been reserved for him.

26. Admission of Foreign Students

In a typical year, students from a dozen or more overseas countrie will be registered in The College of Education. A special effort i made to welcome qualified overseas students who plan to return t their own countries on completion of their studies, and to mee their special needs insofar as the resources of The College permit.

Foreign students and others *who are candidates for the Bachelo of Education degree but not for a teaching certificate of the Ontario Department of Education* must comply with such conditions o admission as The Council of The College may determine. One o the requirements may be a Communication Test for Teaching i the English Language (See Section 12).

27. Pre-College Observation Period

All those who intend to become students in the One-Year Program of The College of Education are strongly advised to apply to the principal of a convenient secondary school for permission to spend a period in the observation of school organization, daily routine and teaching activities at the secondary school level. This period of several days' duration prior to the opening of The College term can be of genuine value to prospective teachers in acquainting them with problems of administration, instruction and student orientation at the beginning of the school year.

28. Program of dies, One-Year ssion, leading he Bachelor of cation Degree

Program of Studies, One-Year Session, leading to the Bachelor of Education Degree

Successful candidates with Canadian citizenship or landed immigrant status will be recommended to the Ontario Department of Education for the Interim High School Assistant's Certificate, Type B.

The program consists of four parts:
Part I Teaching Subjects
Part II Educational Theory
Part III Professional Practice
Part IV Additional Related Courses

Part I
ching Subjects

Teaching Subjects

A candidate must elect at least two teaching subjects.

a Normally a candidate will be required to elect at least one of the following, for which the prerequisite is at least 2 university courses (6 credits):

English 417
French 436
Geography 418
History 424
Latin 432
Mathematics 434
Science 450

b As his second subject, the candidate may elect another subject from (a) or one of the following for which there is no prerequisite unless so indicated:

Art* 402 (6 university credits or background required)
Business and Commerce* 410
Economics 412 (9 university credits required)
Elementary School* 416
Geology 420 (9 university credits required)
German 436 (6 university credits required)
Greek 432 (6 university credits required)
Guidance* 422 (15 university credits required in Psychology, Sociology, Economics or related fields and at least 6 of these credits must be in Psychology)
Home Economics* 428 (variety of background required)
Industrial Arts* 430
Italian 436 (6 university credits required)
Music* 438 (6 university credits or background required)
Physical and Health Education* 442
Political Science 444 (9 university credits required)
Psychology and Sociology 446 (9 university credits required)
Russian 436 (6 university credits required)
School Librarianship* 448
Spanish 436 (6 university credits required)
Theatre Arts* 452

*Courses in these subjects lead to an additional Departmental certificate (See Section 38).

c *Business and Commerce*
A candidate may take two teaching subjects in Business and Commerce (See Section 47); and, on petition granted by The Council of The College, two subjects listed in (b).

d *Type A Candidates*
In selecting his subjects from (a) and (b), a candidate for the Interim High School Assistant's Certificate, Type A, must include the subject or subjects of the Type A Certificate.

e *Modern Languages*
A candidate should not choose a modern language unless he has oral proficiency in the language and a thorough knowledge of phonetics, grammar, and syntax.

f German, Greek, Italian, Russian, and Spanish may be elected only by a candidate for the High School Assistant's Certificate, Type A, in these subjects, except by permission of The Council of The College.

g *Guidance*
Enrolment in the Guidance Course may have to be limited depending upon student demand, availability of staff and adequacy of accommodation. Those candidates who receive credit for this option, may, after one year of successful teaching experience in Ontario, be admitted into Part II of the Department of Education Guidance Course.

h *Physical and Health Education*
Part II of the Intermediate Course in Physical and Health Education or the Specialist Course in Physical and Health Education may be taken as a third option under conditions outlined in Section 38.

i *Theatre Arts*
Because of the nature of Theatre Arts, class size is limited.

j *Changes in Optional subjects*
The time limit for changing optional subjects will be two weeks from the date of registration, and thereafter only by the approval of The College Council.

Part II Educational Theory

Educational Theory

a All candidates will take the course Structural and Legal Bases of the Ontario School System 400.1

b In addition, a candidate must elect three courses from those offered by at least two of the departments as listed below:

Administration and Program Development 400
Program Development 400.2
The Individual Student and the School Program 400.3
Administration in the Modern School 400.4
Administration within the School System 400.5
Individual Research Project 400.6

Educational Psychology 414
Psychology Applied to Education 414.1
The Adolescent – At Home, in School and in the Community 414.2
Teaching – An Interpersonal Process I 414.3
Teaching – An Interpersonal Process II 414.4
Individual Research Project 414.5

History, Philosophy, Sociology of Education 426
Comparative Education 426.1
Dilemmas of Contemporary Education I 426.2(a)
Dilemmas of Contemporary Education II 426.2(b)
Modern Philosophy and Education 426.3
Progressive Education in Theory and Practice 426.4
School and Society 426.5
Sociology of Education 426.6
Values in Education 426.7
Individual Research Project 426.8

c On petition, granted by The Council of The College, a student may substitute a course from Part IV for one of the three courses required from Part II (b).

Part III Professional Practice

Professional Practice

Candidates will be assigned to approved elementary and secondary schools for observation and practice teaching for ten weeks during the session. There are two assignments of four weeks and a final assignment of two weeks. (See Academic Calendar, One-Year Program, page 6). Practice Teaching is conducted under the tutelage of appointed associate teachers in cooperation with the teaching subject departments of The College.

Any candidate absent from scheduled practice teaching duties may be required to make up the assignment at the end of the term.

Part IV Additional ated Courses

Additional Related Courses

These courses offer a candidate the opportunity to concentrate further on one of his teaching subjects by taking a related course, or to pursue an interest in another teaching subject or in the field of general education.

A candidate must elect one course from (a) or (b) below:

a *Administration and Program Development*
Teaching as a Profession 455.19
The School's Institutional Setting 455.20
Evaluation: Measuring Student Performance 455.25
Research Methods in Education 455.26

Computer Studies
Computers in Education 455.05
Educational Tests and Measurements 455.24

Educational Media
Educational Media 455.06

Educational Psychology
Introduction to Child Psychology 455.12
Principles of Programmed Learning 455.16

Elementary School
Art and Crafts for Elementary Schools 455.30
Music for Elementary Schools 455.31
Physical and Health Education for Elementary Schools 455.32
French at the Elementary School Level 455.21

English
Developmental Reading 455.27
The Language Arts of the Cinema 455.22

Geography
Curriculum Theory and Design 455.03
Game Theory and Simulation in Relation to Learning 455.10
Special Education for the Disadvantaged Learner 455.18

History, Philosophy, Sociology of Education
History of Education 455.11
Educational Issues in Perspective 455.28
Marxist Educational Theory 455.33

Mathematics
Research Project in Mathematics Education 455.23

Modern Languages
Applied Linguistics 455.01
Culture and Society as it relates to the teaching of French 455.2
Culture and Society in German Language Teaching 455.02
Electronic Aids to Language Learning 455.07
French at the Elementary School Level 455.21

Physical and Health Education
Current Health Problems in North American Society 455.04
Outdoor Education 455.15

Science
Environmental Studies in Science 455.09

Technical and Industrial Arts
Introduction to Vocational, Occupational and Industrial Ar
Education 455.13

b On petition, granted by The Council of The College:
i a third teaching subject from Part I or a fourth course fro
Part II(b); or
ii a graduate or undergraduate course in another department
the University which is relevant to one of his teaching subject
provided that arrangements can be made with the departme
concerned and there is no conflict with practice teaching. (A co
flict can be avoided by taking classes in the evenings or on Satu
days.) A candidate permitted to take such a course will be subje
to the regulations of the department for admission and cred

Tuition fees will be paid by The College. Candidates for such a course should apply to the Registrar, The College of Education, before August 1.

onditions for mic Standing

The standing of candidates will be determined by the combined results of term work and of the final examinations in the subjects of Parts I, II, and IV, and by the record of Observation and Practice Teaching in Part III.

Standing in the subjects of Parts I, II and IV will be issued as follows: A 80+, B 70–79, C 60–69, D 50–59, F below 50.

A student who obtains 50 per cent of the marks in each of the courses in Parts I, II, and IV and 50 per cent in each of the subjects taught in Part III may be recommended by The Council of The College for the Bachelor of Education degree and for the Interim High School Assistant's Certificate, Type B.

A student who passes in Part III and fails in not more than two of the courses included in Parts I, II, and IV, of which only one may be a teaching subject listed in Part I, may be exempted from further attendance, but will be required to write supplemental examinations in the courses failed. Other students who fail to obtain the necessary standing will be required to attend another one-year session, or the second half of the session (January to May).

A candidate who withdraws from attendance in any program listed in The College of Education Calendar may apply for re-admission in a subsequent year on petition to The Council of The College.

A candidate who fails in a one-year program listed in The College of Education Calendar may be re-admitted in a subsequent year, with the approval of The Council of The College.

Supplemental Examinations

Candidates for the High School Assistant's Certificate, Type B, who failed at an examination under former regulations and were exempted from subsequent attendance at The College of Education will take the final examination papers as prescribed herein, but their standing will be determined in the subjects as constituted under the regulations when they first wrote.

A candidate granted permission to write a supplemental examination may do so in one of the following ways:

Type B

1 by writing an examination in August at the conclusion of a summer session. Application must be made by June 24;

2 by attending the Completing Summer Session or the Six-Weeks' Summer Program for Teachers with Professional Education, taking only the subject(s) failed and writing the examination at the conclusion of the course. Application must be made by June 24.

NOTE: A candidate failing in one or more subjects of the Elementary School Program may write the supplemental examination(s) in August. Application must be made by June 24.

Type A

1 by writing examination(s) in August at The College of Education, University of Toronto, or, if sufficient candidates apply, at approved local centres. Application must be made by June 24;
2 by attending the Type A Summer Seminar. Application must be made by April 1.

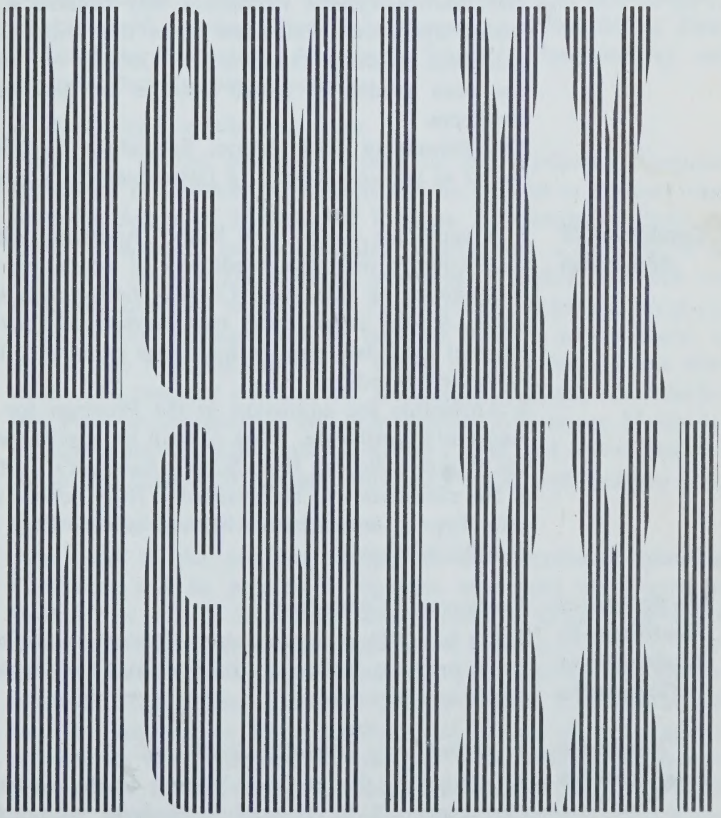
Type A Practical Tests

Type A candidates exempted from attendance will take their supplemental practical tests at The College of Education, or in special cases at approved local centres. Application for practical tests must be made by December 31.

Second Failures

Should a student fail a second time in either or both of his supplemental examinations, he may be admitted to the Summer Session for Teachers with Professional Education in a subsequent year, choosing different optional courses if he so wishes, or he may be refused admission to further courses at the direction of The Council of The College.

Type A, and Business and Commerce Specialist



One-Year Program for the High School Assistant's Certificate, Type A, and Specialist Certificate in Business and Commerce

In general, candidates entering this program must hold an approved degree after a four-year university course following Ontario Grade 13 or equivalent and graduation with at least second class standing. At least 60 university credits are required.

31. The Type A Certificate

The Interim High School Assistant's Certificate, Type A, qualifies the holder for five years as an assistant teacher of academic and general subjects in the secondary schools of Ontario.

The Interim Type A Certificate may become a Permanent High School Specialist's Certificate upon the completion of two years' successful teaching experience in Ontario on which the applicant has been graded as above average on subjects covered by the certificate.

The Permanent High School Specialist's Certificate qualifies the holder to become Head of a Department in a secondary school.

32. Conditions of Admission

1 A candidate for a High School Assistant's Certificate, Type A, shall comply with the conditions of admission prescribed in the Department of Education Circular 649, which is periodically revised. Advice about these requirements as they apply to an individual candidate may be had upon enquiry to the Committee on Advanced Standing.

2 Applicants for admission to the Program for the High School Assistant's Certificate, Type A, shall be applicants for admission to the Program for the High School Assistant's Certificate, Type B.

3 No candidate will be awarded a High School Assistant's Certificate, Type A, *before* he has been awarded a High School Assistant's Certificate, Type B.

33. The Specialist Certificate in Business and Commerce

Business and Commerce

There is no Type A program in Business and Commerce subjects, but a program leading to the Specialist Certificate in Business and Commerce is provided.

Academic Requirements

1 *Accountancy Specialist Cerificate*

Admission to the program leading to the Accountancy Specialist Certificate will be granted to students who hold the degree of

Bachelor of Commerce from an Ontario university, or an equivalent degree from another province or country, with a standing of at least 60% or III Class Standing, whichever is higher, and who are otherwise qualified to enter the High School Assistants' course, Type B. The student will later be required to try a supplemental examination in any of the required subjects in which he has obtained less than 66%. The required subjects are the university equivalents of: Bookkeeping, Accounting I, Accounting II, Business Law (or Business Finance), Business Machines, Economic Principles and one of Business Arithmetic, Office Practice, Business Organization and Management, and Business Finance (or Business Law).

2 *Data Processing Specialist Certificate*

Admission to the program leading to the Data Processing Specialist Certificate in Commercial subjects will be granted to students who hold a Bachelor of Arts or equivalent degree with a standing of 60% or III Class Standing, whichever is higher, and who have taken university courses in the required subjects or who can qualify by tests on these subjects. The required subjects are: Bookkeeping, Principles of Punched Card Data Processing, Principles of Electronic Data Processing, Advanced Computer Programming and Business Data Processing Systems.

3 *Marketing Specialist Certificate*

Admission to the program leading to the Marketing Specialist Certificate in Commercial subjects will be granted to students who hold the degree of Bachelor of Business Administration from an Ontario university or an equivalent degree with a standing of at least 60% or III Class Standing, whichever is higher, and who are otherwise qualified to enter the High School Assistants' Program, Type B. The candidate will be required to try a supplemental in any of the required subjects in which he has obtained less than 66%. The required subjects are: Bookkeeping, Retail Merchandising, Business Organization and Management, Economics, Marketing Principles and one additional Marketing course, and one of Business Machines, Business Arithmetic, Business Finance and Business Law.

4 *Secretarial Specialist Certificate*

Admission to the program leading to the Secretarial Specialist Certificate will be granted to students who hold the degree of Bachelor of Arts in Secretarial Science from an Ontario university or an equivalent degree with a standing of at least 60% or III Class Standing, whichever is higher, and who are otherwise qualified to enter the High School Assistants' course, Type B. The student will later be required to try a supplemental in any of the required subjects in which he has obtained less than 66%. The required subjects are the university equivalents of Typewriting, Shorthand Theory, Shorthand Practice, Office Practice, Secretarial I and II and

one of Business Correspondence, Business Machines, Business Arithmetic and Business Organization and Management.

34. Recommendation of Type A and Specialist Certificates

Subject to the condition that no student may be awarded a High School Assistant's Certificate, Type A, who does not already hold or is not also awarded a High School Assistant's Certificate, Type B, the final standing of candidates in attendance in the High School Assistants' Program, Type A, will be determined by the records of the practice teaching in the department or subject concerned, and by the combined results of the term work and the final examinations in the same department or subject. The pass mark is second class honours in the final examinations (including sessional records) and a rating of Good or Better on the marks assigned to the practice teaching in the Type A field.

35. Supplemental Examinations

Information regarding supplemental examinations is found in Section 30.

Additional Certificates for Students in the High School Assistants' Program, Type B

A candidate in the High School Assistants' Program, Type B, may elect as an option one of a number of courses leading to additional teaching certificates.

36. Programs

1 Art (leading to Part I of the Intermediate Certificate in Art)
2 Business and Commerce (leading to Parts I and II of the Intermediate Certificate in Accountancy, Data Processing, Marketing, or Secretarial)
3 Elementary School (leading to the Elementary School Teacher's Certificate)
4 Guidance (Part I of the program leading to the Specialist Certificate in Guidance)
5 Home Economics (leading to the Intermediate Certificate in Home Economics)
6 Industrial Arts (admits to a program leading to the Intermediate Certificate in Industrial Arts)
7 Music (leading to Part I of the Intermediate Certificate in Vocal Music)
8 Music (leading to Part I of the Intermediate Certificate in Vocal and in Instrumental Music)
9 Physical and Health Education (leading to Part I of the Intermediate Certificate in Physical and Health Education)
10 Physical and Health Education (leading to Part II of the Intermediate Certificate in Physical and Health Education)
11 Physical and Health Education (leading to the Specialist Certificate in Physical and Health Education)
12 School Librarianship (leading to Part I of the Intermediate Certificate in School Librarianship)
13 Theatre Arts (leading to the Theatre Arts Certificate)

37. Notes Regarding Courses for Additional Certificates

a *Business and Commerce*

Previous Business Education or experience is not required of a candidate who selects one or two options in Business and Commerce. A candidate may be required to attend an evening extension course in the Part I subject content.

A candidate who selects only one option in Business and Com-

merce leading to Part I of the Intermediate Accountancy, Dat Processing, Marketing or Secretarial certificate must take one othe option. He will be required to attend one additional summer cours to qualify for the Intermediate Certificate in the Business an Commerce field concerned. A candidate who selects Parts I and I may qualify for the Intermediate Certificate in the One-Year Program

b *Home Economics*

Admission to the course for the Intermediate Home Economic Certificate is restricted to candidates who submit evidence o graduation with a standing not lower than 60% in Home Eco nomics of the final year from a university program having at leas five approved courses in Home Economics.

c *Music*

A candidate who selects Vocal Music as an optional subject of th High School Assistants' Program, Type B, may, with the approva of the instructor, choose Instrumental Music as a supplementar course.

Admission to the Intermediate Instrumental Music course will b restricted to candidates for Part I of the Intermediate Vocal Musi Certificate.

d *Physical and Health Education*

There are no prerequisites for admission to the Intermediate course Part I.

Students who meet the admission requirements may become candi dates for Part II of the Intermediate Certificate in Physical an Health Education or for the Specialist Certificate in Physical an Health Education.

The admission requirement for the Intermediate course, Part II, i a minimum of two university courses in Physical and Health Educa tion.

The admission requirement for the Specialist course is a minimun of 24 university credits in Physical and Health Education an related subjects (exclusive of methods courses).

Courses leading to Part II of the Intermediate Certificate and t the Specialist Certificate will be taken as a third option *in additio* to the course leading to the Interim High School Assistant's Certif cate, Type B, if a sufficient number of applications are received t warrant inclusion of these courses in the program. To be eligible, candidate must also select the Physical and Health Education optio leading to Part I of the Intermediate Certificate as one of th methods options.

After successful completion of Part II of the Intermediate Cert ficate, a candidate may proceed to the Specialist qualification i summer sessions but not until the candidate has completed on year of successful teaching.

e *School Librarianship*

The course leading to Part II of the Intermediate School Librarianship Certificate may not be taken in the summer immediately following completion of the One-Year Program.

38. Recommendation of Additional Certificates

1 *Art, Business and Commerce, Guidance, Home Economics, Industrial Arts, Music, Physical and Health Education, School Librarianship, Theatre Arts.*

On the recommendation of The Council of The College, the following additional certificates may be granted to a candidate in the Program for a High School Assistant's Certificate, Type B, provided that the student is awarded the High School Assistant's Certificate, Type B: Part I of an Intermediate Certificate in Art, Business and Commerce Subjects, Physical and Health Education, Vocal Music, Instrumental Music, School Librarianship; the Certificate in Theatre Arts; the Intermediate Certificate in Home Economics; credit for Part I of the program leading to the Specialist Certificate in Guidance; admission to a program leading to the Intermediate Certificate in Industrial Arts.

2 *Physical and Health Education*

On recommendation of The Council of The College, Part II of the Intermediate Certificate in Physical and Health Education may be granted to a candidate who achieves the above stated standard for Part I of the Intermediate Certificate and who obtains 50% of the marks assigned to the written examinations and practical tests of the course leading to Part II of the Intermediate Certificate. The Specialist Certificate may be granted to a candidate who achieves the above stated standard for Part I of the Intermediate Certificate and who obtains 66% of the marks assigned to Observation and Practice Teaching in the course and 66% of the marks assigned to written examinations and practical tests of the course leading to a Specialist Certificate.

Ontario Teachers' Aquatic Standard – A candidate who is exempted by a medical certificate from a course in aquatics or a candidate who has failed to meet the aquatic standard may be awarded a certificate in Physical and Health Education endorsed 'without aquatics'. A candidate who meets the aquatic standard may be awarded a certificate endorsed 'Credit O.T.A.S.'.

39. Programs for Candidates not Recommended for a Department of Education Certificate

A candidate for one of the following additional certificates who has met the other requirements of the Type B certificate but has failed to obtain pass standing in the remainder of the course may earn pass standing and be recommended for standing by following the conditions listed below:

1 In *Art, Vocal Music, Instrumental Music, School Librarianship or Theatre Arts*, a candidate who fails in not more than two subjects of the written and practical tests may complete his standing

by passing in the subjects concerned at a subsequent examination without further attendance, but in the subjects of the practical tests such a candidate must try tests conducted at the Summer Session or by arrangement approved by The Council of The College. Any other candidate who fails shall repeat the course for standing.

2 In *Business and Commerce*, a candidate who fails in the written or practical tests in not more than two subjects may complete his standing at a subsequent examination or by attendance at a subsequent Summer Session.

A candidate who takes only one option in Business and Commerce must qualify for Part I of the Intermediate Certificate in order to qualify for an Interim High School Assistant's Certificate, Type B.

A candidate who takes two options in Business and Commerce must qualify for Parts I and II of the Intermediate Certificate in Business and Commerce in order to qualify for an Interim High School Assistant's Certificate, Type B.

3 In *Guidance*, a candidate who fails to obtain standing may complete his standing, without further attendance, by meeting certain conditions which will be determined in each case by the Professor of Guidance and The Council of The College.

4 In *Home Economics*, a candidate who fails in the written examinations but passes in all the subjects of the term work may complete her standing by passing in the written examination at a subsequent date without further attendance. A candidate who passes in the written examinations but fails in one or more of the subjects of the term work may obtain her standing by completing successfully a subsequent Summer Session under conditions to be determined by The Council of The College. Any other candidate who fails shall repeat the course for standing.

5 In *Industrial Arts*, a candidate who fails in the written examinations but passes in all the subjects of the practical tests may complete his standing by passing in the written examination at a subsequent date without further attendance. A candidate who passes in the written examinations but fails in one or more of the subjects of the practical tests may obtain his standing by completing successfully a subsequent summer course under conditions to be determined by The Council of The College. Any other candidate who fails shall repeat the course for standing.

6 In *Physical and Health Education*, if a candidate fails to achieve the passing standard, the course must be repeated either in a subsequent Summer Session or in the regular One-Year Program

Program for the Elementary School Teacher's Certificate (Standard 4)

he Elementary hool Teacher's Certificate

In order to qualify as a teacher in both elementary and secondary schools in Ontario, a candidate may elect as one option a program leading to the Interim Elementary School Teacher's Certificate.

. Conditions of Admission

1 Candidates shall comply with the conditions of admission and attendance prescribed for candidates of the High School Assistant's Program, Type B,

2 Applicants should note that no candidate will be awarded an Interim Elementary School Teacher's Certificate before he is awarded an Interim High School Assistant's Certificate, Type B.

3 Candidates should have a university background with breadth in the arts, science or languages together with courses in psychology, sociology or child study.

42. Program of Studies

Because the Program for the Elementary School Teacher's Certificate offers instruction in a group of courses, the total lecture time is *ten hours per week*. This fact should be considered carefully when the candidate is selecting options in the High School Assistant's Program, Type B.

The Elementary School Program consists of the following courses and activities:

PART I

Compulsory Courses:
416.1 English for Elementary Schools (2 hours)
416.2 Foundations for Elementary Education (Special Lectures)
416.3 Mathematics for Elementary Schools (2 hours)
416.4 Science for Elementary Schools (2 hours)
416.5 Social Studies for Elementary Schools (2 hours)
and at least one of the following Additional Related Courses:

455.30 *Art and Crafts for Elementary Schools** (2 hours). An introduction to the creative use of media in two and three dimensions; basic design, point, line and shape; print-making; teaching methods; subject integration.

455.21 *French at the Elementary School Level** (2 hours). French as a second language from the earliest grades of the elementary

school; programs; procedures specific to the age level; audio-visual aids.

455.31 *Music for Elementary Schools** (2 hours). A study of contemporary approaches to music learning in elementary schools. Student teachers in this course will be required to participate in a variety of activities.

455.32 *Physical and Health Education for Elementary Schools** (2 hours). A critical examination of teaching procedures which relate specifically to the aims of Physical and Health Education; an activity course based on participation in and examination of games, gymnastics and dance appropriate for the healthy development of children ages 6 to 14.

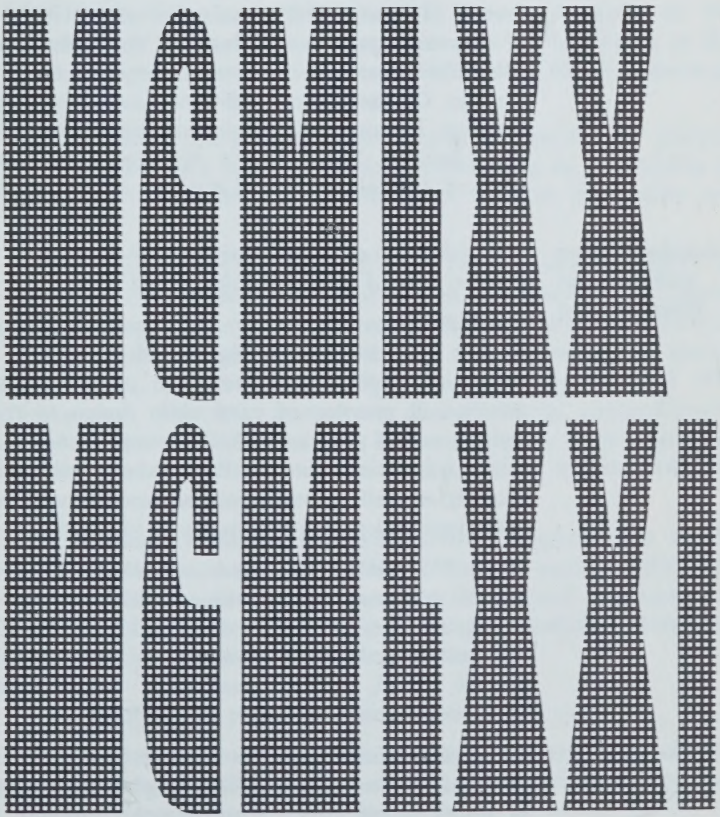
*Enrolment preferences will be given to candidates registered in the Elementary School Program.

PART II

Observation and Practice Teaching (five or six weeks) in selected elementary school classrooms of Metropolitan Toronto. Such weeks are included within the ten weeks of Observation and Practice Teaching required of all students in the Program for the High School Assistant's Certificate, Type B.

43. Supplemental Examinations

A candidate failing in one of more subjects of the Elementary School Program may write the supplemental examination(s) in August. (See Section 30.)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Details of Courses in Programs leading to the Bachelor of Education Degree and to the Interim High School Assistant's Certificate and Additional Certificates

In each case, the numeral in brackets indicates the number of lecture hours per week.

44. Required Course

All students proceeding to the Bachelor of Education Degree and to the High School Assistant's Certificate, Type B, will be required to take:

400.1 *The Structural and Legal Bases of the Ontario School System* (1 hour). The organization of provincial and local systems of education; powers and duties of the various educational authorities; the Education Acts and Regulations of the Province of Ontario. Course content will be covered primarily through directed readings. Lectures will be given on related topics of current educational interest. The course is conducted by the staff of the *Department of Administration and Program Development.*

45. Administration and Program Development

400 *Administration and Program Development*
Courses offered in Part II Educational Theory

400.2 *Program Development.* An examination of the rôle of the teacher as a designer of educational experiences within the school program. Emphasis will be given to the application of current theory and practice of curriculum design to the development of specific school programs which attempt to meet a variety of individual and societal needs. Participants will undertake individual projects as well as participate as a member of a curriculum team in the production of group materials. (4 hours)

400.3 *The Individual Student and the School Program* (2 hours). School programs and practices which meet individual differences among students. A general study will be made of innovative teaching and organizational patterns, including particularly the nongraded school, credit organization, house plans, team teaching, independent study, and other related topics.

400.4 *Administration in the Modern School* (2 hours). A practical study of the use and organization of school resources and services in providing an effective educational program. Emphasis will be

placed on the rôle of the teacher in phases of school operation such as discipline, staff relationships, organization of classes, individualizing instruction, evaluation procedures, and the design and implementation of overall school programs.

400.5 *Administration within the School System* (2 hours). A review of planning and administrative procedures in large systems of education. Particular emphasis will be given to the organization of learning resources, student services, and parent-teacher-student relationships. The interaction of trustees, senior officials, resource personnel, and school administrators will be considered. The effectiveness of large systems in formulating and in achieving desirable educational programs for the individual student and for society as a whole will provide a constant focus for study.

400.6 *Individual Research Project.* Students who wish to engage in an individual research topic must consult a member of the Department at the time of College registration.

Courses offered in Part IV, Additional Related Courses

455.19 *Teaching as a Profession* (2 hours). A study of the development of teaching as a profession; the current status of the profession, and new orientations within the North American context; interprofessional relationships.

455.20 *The School's Institutional Setting* (2 hours). An analysis of the school as a social institution, emphasizing its relationship to other social structures and the impact of these on the teacher and teaching.

455.25 *Evaluation: Measuring Student Performance* (2 hours). A study of current evaluation practices in the schools. The course will develop some of the theoretical issues underlying evaluation methods, the design and marking of a wide variety of testing instruments, including essay, objective, oral, project, and self-assessment. The fair assessment of individuals, comprehensive systems for schools, distinctions between subjects, home reporting, concepts of promotion and failure, and grading systems will also be considered.

455.26 *Research Methods in Education* (2 hours). This course will introduce students to methods of research used in Education. Emphasis will be directed to research in Educational Administration and Program Development. During the course students will develop a research project of their own.

46. Art

402 *Art* (6 hours)
Creative pictorial expression; drawing and sketching from objects; plastic design; model-making; design and lettering; theory and history of Art; methods of teaching.

502 *Seminar in Art* (4 hours)
For Type A candidates in Art.
Classroom methods and problems relating to advanced grades; use of illustrative source materials such as slides, prints and exhibitions in the interpretation and study of Art history and criticism; advanced study of the theory, history and practice of Art; painting, mosaics, stage design, silk screen, batik, lino block printing.

47. Business and Commerce Courses for the Intermediate Certificate

1 Accountancy Program

a *one option*
Intermediate Part I
Typewriting 410.101
Bookkeeping 410.111
Principles and Practices of Teaching Typewriting 410.103
Principles and Practices of Teaching Bookkeeping 410.113

b *two options*
Intermediate Part I
plus
Intermediate Part II
Principles and Practices of Teaching Business 410.153
Business Machines 410.201
Business Law 410.204
or Business Finance 410.205
One of:
Business Organization and Management 410.231
Machine Mathematics 410.202
Office Practice 410.222
Business Finance 410.205
or Business Law 410.204

2 Data Processing Program

a *one option*
Intermediate Part I
Introduction to Data Processing 410.141
Bookkeeping 410.111
Principles and Practices of Teaching Data Processing 410.143

b *two options*
Intermediate Part I
plus
Intermediate Part II
Principles and Practices of Teaching Bookkeeping 410.113
Typewriting 410.102
Principles and Practices of Teaching Business 410.153
Principles of Electronic Data Processing 410.241
One of:
Business Machines 410.201
Business Organization and Management 410.231
Business Finance 410.205
or Business Law 410.204

3 Marketing Program

a *one option*

Intermediate Part I

Typewriting 410.101
Principles and Practices of Teaching Typewriting 410.103
or
Bookkeeping 410.111
and
Principles and Practices of Teaching Bookkeeping 410.113
Retail Merchandising 410.131
Principles and Practices of Teaching Merchandising 410.133

b *two options*

Intermediate Part I

plus

Intermediate Part II

Principles and Practices of Teaching Business 410.153
Economics of Distribution 410.232
Business Organization and Management 410.231
One of:
Business Machines 410.201
Business Law 410.204
Business Finance 410.205
Office Practice 410.222

4 Secretarial Program

a *one option*

Intermediate Part I

Typewriting 410.101
Shorthand 410.121
Principles and Practices of Teaching Typewriting 410.103
Principles and Practices of Teaching Shorthand 410.123

b *two options*

Intermediate Part I

plus

Intermediate Part II

Principles and Practices of Teaching Business 410.153
Shorthand Practice 410.221
Office Practice 410.222
Office Procedures 410.224

Courses for the Specialist Certificate

1 *Accountancy Specialist*

Introduction to Data Processing 410.141
Principles and Techniques of Teaching Accounting 410.413
Organization and Supervision of a Commercial Department 410.453

2 *Data Processing Specialist*

Retail Merchandising 410.131 (regular session only)
Principles and Practices of Teaching Electronic Data Processing (Methods) 410.143
Organization and Supervision of a Commercial Department 410.453

3 *Marketing Specialist*

Consumer Principles and Practices 410.234
Principles and Techniques of Teaching Marketing 410.433
Organization and Supervision of a Commercial Department 410.453

4 *Secretarial Specialist*

Introduction to Data Processing 410.141
Principles and Practices of Teaching Office Practice and Secretarial Subjects 410.423
Organization and Supervision of a Commercial Department 410.453

If an applicant receives credits for courses taken at university or in the four-year Business and Commerce secondary school for

more than half the required Intermediate Parts I and II and Specialist certificate courses, he may select the Specialist program as one option only.

NOTE: All courses cannot be offered every year.

Description of Business and Commerce Courses

NOTE: Courses for which the hours are not shown are normally offered only in the summer sessions.

410.101 *Typewriting Techniques and Practices* (1 hour). Development of a basic facility in typing; application of this skill to letters and business forms.

410.102 *Typewriting Techniques* (1 hour). Introduction to the fundamentals of touch typing; familiarization with keyboard and typing problems. (Less basic skill is required than in 410.101.)

410.103 *Principles and Practices of Teaching Typing* (2 hours). Problems of teaching typewriting in Grades 9 and 10.

410.111 *Bookkeeping* (2 hours). Introduction to accounting; covering journalizing; posting accounts; statements; special journals; closing the books, etc.

410.113 *Principles and Practices of Teaching Bookkeeping* (2 hours). Problems of teaching bookkeeping in Grades 10 and 11.

410.121 *Shorthand Theory* (2 hours). Theory and application of Pitman shorthand.

410.123 *Principles and Practices of Teaching Shorthand* (2 hours). Methods, approaches and practices in the teaching of elementary shorthand.

410.131 *Retail Merchandising* (2 hours). Fundamental principles of selling as it pertains to retail organizations.

410.133 *Principles and Practices of Teaching Merchandising* (2 hours). Principles of the teaching of retail merchandising illustrated by involving the student teacher in the methods of presenting merchandising.

410.141 *Introduction to Data Processing* (2 hours). Survey of the field of data processing and the equipment used.

410.143 *Principles and Practices of Teaching Data Processing* (2 hours). Presentation and discussion of current methods of teaching data processing and computer programming.

410.153 *The Principles and Practices of Teaching Business* (2 hours). Discussion of development, aims, equipment and methods of teaching business subjects.

410.201 *Business Machines* (2 hours). Development of a basic facility in the use of common business machines.

410.202 *Machine Mathematics* (2 hours). Study of the mathematical problems of business and their conversion to such a form that they can be adapted to solution on business machines.

410.204 *Business Law.* Study of the basic law required for the secondary school Law course; contracts; negotiable instruments; employer and employee; principal and agent; bailments, etc.

410.205 *Business Finance.* Study of business and government financing as an introduction to the building of an investment program.

410.221 *Shorthand Practice* (2 hours). Development and application of skill in Pitman shorthand and transcription.

410.222 *Office Practice* (2 hours). Study of practices and procedures followed in the modern office.

410.224 *Office Procedures* (2 hours). The teaching of advanced stenographic techniques and the organization of business.

410.225 *Business Correspondence.* Composition, language and letter writing for Grades 11 and 12 pupils.

410.231 *Business Organization and Management* (1 hour). Survey of the functional areas of business; manufacturing; purchasing; marketing; finance and personnel for various types of organizations and government.

410.232 *Economics of Distribution* (1 hour). Introduction of fundamentals of marketing; production for distribution; gross national product and distribution in a socialist or communist state.

410.234 *Consumer Principles and Practices.* Study of money and consumer prices; consumer credit; family budget.

410.241 *Principles of Electronic Data Processing* (2 hours). Introduction to computer concepts and the stored program.

410.311 *Accounting I* (1 hour). Accounting theory for department, vouchers, manufacturing and costing.

410.341 *Electronic Data Processing I.* The computer as a business tool; flow charting procedures; computer concepts; data flow; solution of business problems.

410.331 *Marketing I.* Process of marketing, merchandise knowledge, salesmanship, etc., as outlined for the Grade 11 secondary school course.

410.321 *Secretarial I.* Theory and application of Pitman shorthand. Dictation to a speed of 70 words per minute and transcription of 35 words per minute is required.

410.411 *Accounting II.* Continuation of Accounting I including work on partnerships, corporations, bonds, reserves, and interpretation of financial statements.

410.421 *Secretarial II.* Advanced Pitman shorthand and secretarial techniques. Dictation at 80 words per minute and transcription at 40 words per minute is required.

410.431 *Marketing II.* Continuation of Marketing I, as outlined for the Grade 12 course, secondary schools.

410.441 *Electronic Data Processing II.* The need for 'Mar machine-communications'; understanding of computer systems a a file processor.

410.413 *Principles and Practices of Teaching Accounting* (1 hour) Discussion of the methods of teaching accounting.

410.423 *Principles and Practices of Teaching Office Practice an Secretarial Subjects* (1 hour). Advanced stenographic and secr tarial techniques and practices including the organization an operation of modern office practices and procedures.

410.433 *Principles and Practices of Teaching Marketing* (1 hour) Advanced principles of teaching marketing. The course is practic oriented with the emphasis placed on the individual.

410.443 *Principles and Practices of Teaching Electronic Dat Processing* (1 hour). Presentation and discussion of teaching con puter concepts and programming for total information processin

410.453 *Organization and Supervision of a Business and Commerc Department* (1 hour). Study of the problems that confront th Director of a Business and Commerce Department and the begi ning teacher.

NOTE: For information regarding Business and Commerce cours write to the Director, Business and Commerce Department, Th College of Education.

48. Computer Studies

Courses offered in Part IV, Additional Related Courses

455.05 *Computers in Education* (2 hours). This course is designe to study the use of the computer as an instructional and as a administrative tool. Areas to be discussed include: Compute Assisted Instruction, Test Scoring, Item Analysis, Curriculun Educational Research, Student Accounting and other studen oriented areas. Emphasis is on the computer as a problem-solvi tool. Prior computer courses or knowledge is not required. Acce to the computer centre will be available to students for clas assigned and other approved projects.

455.24 *Educational Tests and Measurements* (2 hours). Th course emphasizes the practical approach to tests and measur ments. Students will be required to construct tests and use th computer to evaluate their results. Other areas of study include techniques of measurement; test construction; application of tes ing; and concepts of educational measurement. Computer trainin or experience not essential.

49. Economics

412 *Economics* (4 hours). Purpose of teaching Economics and i position in secondary school programs; organization of course teaching methods and special devices; examinations and testing.

512 *Seminar in Economics* (1 hour). For Type A candidates i

Economics. Place of Economics in the secondary school curriculum; value of the subject; goals of the teacher; suitable teaching methods; use of graphs, charts and individual reports; analysis and planning of the Grade 13 course; resource materials in books, newspapers, business and government reports, etc.; audio-visual aids; history of Economics; schools of economics thought; examinations.

0. Educational Media

Course offered in Part IV, Additional Related Courses

455.06 *Educational Media* (2 hours). The course will include a study of the basic principles of communication; the use of the various media such as film projectors, tape recorders and television will be a major part of the course.

1. Educational Psychology

414 *Educational Psychology*

Courses offered in Part II, Educational Theory

414.1 *Psychology Applied to Education* (2 hours). Open to all students. Designed to show relevance of general Psychology to teaching. Provides an overview of the areas of Psychology related to education and teaching; problems in human communication, rôle of feedback, non-verbal communication, mass media, T.V., radio. Modern theories of learning will be examined and compared; the relevance of learning theory to motivation, aptitudes and attitudes, learning discrimination and skills, the slow learner, development, maturation and special education, research in education, programmed learning and computer-assisted instruction.

414.2 *The Adolescent – At Home, in School and in the Community* (2 hours). The adolescent period; adolescent needs and processes of adjustment; the adolescent and social class; adolescent-adult relationships; the adolescent and his peer group; physical development; intellectual development; development of interests, attitudes and values; heterosexual development of adolescents; adolescent disciplinary problems; adolescent delinquency.

414.3 *Teaching – An Interpersonal Process I* (2 hours). The teacher as partner in an interpersonal learning process; increased awareness and insight about forces operating in groups; how one's own behaviour affects group productivity; application of theory to development of innovative plans for better classroom teaching using large and small groups.

414.4 *Teaching – An Interpersonal Process II* (4 hours). This course is planned for students who wish to pursue in greater depth the areas of study included in Course 414.3. In addition, it will include enquiry into the principles of sensitivity training and the various types of encounter groups, and the way in which experience in small group living will increase the awareness of the forces affecting the teacher and the student in the school situation. Increased self-understanding and the ability to structure the social environment

for the improvement of learning are among the goals of this course.

414.5 *Individual Research Project.* Students with good academic background in Psychology and some previous research experience may be permitted to do an individual research project on some topic related to Psychology and its application to education. Students seeking such permission must have the approval of a departmental committee which may recommend to The College Council that permission be granted to pursue this research project in lieu of one and in exceptional cases two courses in Educational Psychology.

Courses offered in Part IV, Additional Related Courses

455.12 *Introduction to Child Psychology* (2 hours). Motivation; why children learn; physical characteristics and school behaviour; children's abilities; children as social creatures; personality adjustment.

455.16 *Principles of Programmed Learning* (2 hours). Preparing and structuring objectives; programming styles; linear and branching; principles of writing and revising programs; feedback; computer-assisted instruction; program evaluation.

52. English

417 *English* (4 hours)

LITERATURE:

Values inherent in the study of good literature; basic approaches; various methods of presenting such literary forms as the poem, the drama, the essay, the short story, and the novel; the choosing of suitable text-books for pupils of different abilities and grades; planning courses of study; setting and marking examination papers; oral and supplementary reading; problems related to the teaching of English literature.

COMPOSITION:

The basic aim in teaching composition; place and treatment of grammar, rhetoric, logic and word study in the teaching of composition; principles to be followed in arranging courses; studying models; assigning, planning, evaluating and correcting compositions; improving the pupil's oral English; conducting class discussions; problems related to the teaching of English composition.

MEDIA:

The basic aim in treating mass media; objectives; categories; procedures.

ELECTIVES:

Creative thinking; developmental reading; creative drama; screen education; group dynamics; creative writing; mass media; psycholinguistics.

517 *Seminar in English* (4 hours). For Type A candidates in English and, in part, English and Drama, English and French, English and German, English and History, English and Latin, English and Russian, English and Spanish.

Teaching and discussion of selected topics; the English specialist; the Head of the Department; new methods; sequential programming; thematic study; comparative techniques; enrichment; acceleration; the slow learner; educational television; the new grammar; works in translation; remedial and developmental reading; advanced and general courses; mass media; creative thought; creative writing; professional development; the ungraded school; the future of English studies.

Courses offered in Part IV, Additional Related Courses

455.22 *The Language Arts of the Cinema* (2 hours). The course is designed to study trends in contemporary cinema. Although the course concentrates mainly on feature films of such directors as Hitchcock, Bergman, Varda, Antonioni, Fellini, Godard, Truffaut, Resnais, Losey and Lester, it does not neglect the popular cinema nor does it omit experimental short films. The several arts of the director, script writer, actor, editor, lighting-cameraman, composer, and sound man are studied so that the students may have a full appreciation of the language arts amalgam that we experience in the cinema. Enrolment is limited.

455.27 *Developmental Reading* (2 hours). This course is designed to introduce students to the possibilities of developmental reading at the secondary school level. Basic principles underlying an instructional program will be discussed. Specific methods of determining reading achievement, selecting patterns of organization, and planning the instructional program will be introduced. Of major emphasis will be the devising of practical developmental reading programs. Enrolment is limited.

3. Geography

418 *Geography* (5 hours). Listed below are a number of Geography course units designed to give a degree of flexibility in the preparation of Geography teachers. This professional course has been designed to meet the demand for professionally trained people who are either

i graduate Geographers (Type A candidates)

ii other University graduates (Type B candidates)

and who will proceed to a career in education, either as a specialist teacher of Geography, or as one who wishes to teach Geography together with other subjects. Because the department uses a team approach, two or more members of staff may be concerned with each unit.

418.1 *Geography – Orientation.* The scope of the rôle of the Geography teacher.

418.2 *Geography – Curriculum Planning.* Recognition of a curriculum framework as a general context within which the strategy of obtaining educational objectives and classroom practice may be discussed; examination of courses of study in order to identify and

evaluate their components in relation to the principles of curriculum design.

418.3 *Geography – Instructional Techniques and Procedures.* Recognition, analysis and construction of learning situations in order to understand how educational objectives in Geography are achieved; study of various resource materials, teaching procedures and techniques which facilitate the achievement of such objectives; investigation and construction of objectives and the development of units of study as an organizing structure within which effective instruction and learning take place.

418.4 *Geography – Educational Measurement and Evaluation.* A study of ways to evaluate the effectiveness of learning experience.

418.5 *Geography – Field Studies.* Integration of the objectives and techniques of 'landscape' study.

Geography – Practice Teaching. A clinical observation of the teaching-learning process; an expression of philosophy, techniques and procedures in the classroom and in the field.

416.5 *Geography – Elementary School.* A program based on the second, third and fifth Geography courses outlined above.

518 *Seminar in Geography* (3 to 4 hours). For Type A candidates in Geography. Candidates will meet as a special class in a program concerned with the study of Principles of Curriculum Design as models for the development of geography curricula which meet the various future conditions and variables in education.

Courses offered in Part IV, Additional Related Courses

455.03 *Curriculum Theory and Design: A Research Seminar* (2 hours). Enquiry into the theory and design of a curriculum and the examination of curriculum projects in the field of social studies and geography at the elementary and secondary school levels.

455.10 *Game Theory and Simulation in Relation to Learning* (2 hours). An introduction to game theory and simulation as an approach to learning in geography and social science.

455.18 *Special Education for the Disadvantaged Learner* (2 hours). An introduction to the scope and range of this specialized field in education related to the needs of exceptional children. (Students who enrol must be prepared to meet with guest instructors at various times and places.)

54. Geology

420 *Geology* (4 hours). Value and objectives of a Geology course in the Ontario secondary school curriculum: Four-Year Program; investigation and study of appropriate teaching methods; procedures and curriculum organization; use and value of maps, equipment, teaching aids, books and field exercises for secondary school Geology.

520 *Seminar in Geology* (3 hours). For Type A candidates in

Geology. (These candidates are advised to select Geography and Science as options in the High School Assistants' Program, Type B.)
Teaching and discussion of the Geology curriculum; development and analysis of some of the difficult topics by means of original research and subsequent reports; experimental treatment of the work; field exercises; use of texts, manuals, maps and teaching aids; measurement and evaluation; organization and timing of a course of study in Geology and Mineralogy; discussion of appropriate teaching methods and procedures.

518/20 *Seminar in Geography and Geology* (3 hours). For Type A candidates in Geography and Geology.
Contents and methodology of the prescribed courses in Grades 11, 12 and 13. Additional details of the seminar are included in prescriptions for Geography and Geology above.

55. Guidance

422 *Guidance* (6 hours). Foundations of Guidance; counselling theory and practice; assembling educational and occupational information for student use; individual assessment procedures; group techniques in Guidance.

NOTE: For further information regarding the course in Guidance, write to the Guidance Department, The College of Education, University of Toronto.

56. History

424 *History* (3 hours). Position of History in the high school curriculum; the 'uses' of History and the aims of the teacher; principles of selecting content and various methods of organizing; classroom methods, such as question-development, lecture, supervised work, socialized techniques, Fenton's enquiry method, classroom groups, rôle-playing, audio-visual lessons, team-teaching, etc.; prescribed sections of academic work for illustrative use; the teaching of Four-Year classes; Two-Year students; enrichment for gifted students; History in the ungraded school; standards and examinations; the case for social studies; the impact of the Hall-Dennis Report; the other social sciences in relation to History teaching; the planning of curriculum; resources.

524 *Seminars and Lectures in History* (2 hours). For Type A candidates in History and in English and History.
This course includes the essential content of History 424, and the following:
Studies in the philosophy of History and approaches to History teaching; interpretations of history; history as a social science and as a humanistic subject; controversy and bias in history; the contribution of the social scientist to history; the use of documents; an appraisal of enquiry techniques, case-history studies, the Harvard unit series, etc.; the rôle of the History Specialist; the maintenance and improvement of scholarship; problems and current trends in the teaching of History.

57. History, Philosophy, Sociology of Education

426 *History, Philosophy, Sociology of Education*

Courses offered in Part II, Educational Theory

426.1 *Comparative Education* (2 hours). Much of the content of this course can be determined by the interests of students enrolling for it. In general terms it may be concerned with methods in comparative education, with certain distinctive features in the educational systems of Canada and other leading countries in the western world, and with trends towards international cooperation in education.

426.2 **a** *Dilemmas of Contemporary Education I* (2 hours). The course is aimed at introducing the student to the dilemmas of contemporary education. These dilemmas include the contrasting of traditional approaches to education and contemporary theories; the problem of learning in the era of the 'knowledge explosion'; the place of the specialist in the schools; the interrelationships of the disciplines; the rôle and function of the teacher in the changing social structure; and so on. Various theories proposed as means of overcoming these problems will be considered, and it is hoped to obtain practical experience in dealing with them in Course II described below.

426.2 **b** *Dilemmas of Contemporary Education II* (2 hours). This course is specifically designed to complement Course 2(a) described immediately above. The emphasis will be on putting theories into operation. Problems involving various disciplines will be studied and interdisciplinary approaches to clarifying issues will be attempted. An effort will be made to establish bonds with other departments of The College so that the student can learn by experience of the impact of one discipline on another. The course is experimental. No prerequisites are imposed, but the number of students taking Courses I and II will of necessity be limited.

NOTE: Dilemmas of Contemporary Education I and II are concurrent courses; that is, a student who registers in one must register in the other (2 hours for each course, a total of 4 hours).

426.3 *Modern Philosophy and Education* (2 hours). Through the examination of selected modern philosophical works, this course will deal with such key problems (among others) as human freedom, coercion in the classroom, the problem of absurdity, social philosophy and educational theory, approaches to student-centred education, the influence of modern philosophy on methodology in education. Conflicting viewpoints in recent philosophy will also be introduced and examined speculatively in an educational context.

426.4 *Progressive Education in Theory and Practice* (2 hours). An analysis and discussion of progressive theories and practices over the past two hundred years, with special reference to the ideas of Rousseau, Dewey, and Ontario's Hall-Dennis Report, for the purpose, in the main, of inducing beginning teachers to search con-

stantly for meaning in such familiar learning concepts as interest, activity, discovery, assimilation, freedom, authority, natural growth, creativity, continuous progress.

426.5 *School and Society* (2 hours). This course will involve a consideration of such problems as socio-cultural influences on educational achievement, value conflicts (between generations and among socio-economic classes), and the conflicting functions of the school as an institution for transmitting the cultural heritage as well as criticizing it. An analysis of these problems will uncover such issues of current concern to schools and teachers as 'the generation gap', 'educational control', 'student power'.

426.6 *Sociology of Education* (2 hours). An examination of the school as an institution in the society which it serves. Topics will include the structure of society and education, education and social change, education and social mobility, the socialization of the child, the social rôle of the teacher, the influence of economic and political forces on education, education and the values of the community and the nation, education and international relations. Students will be expected to relate the principles discussed to their own communities. Previous university work in sociology is desirable but not mandatory.

426.7 *Values in Education* (2 hours). An examination of selected topics in value theory seen within the educational context. Examples of possible topics: authority and freedom; perception and judgment in education and the arts; the aims of education; valuational impact of the mass media; the teacher and the new morality; expression, representation, and value formation; conceptual analysis of the educational environment. No formal background in philosophy is required.

426.8 *Individual Research Project.* Qualified students who wish to substitute an independent study project for one or two (not more) courses in this Department, must first obtain the approval of a member of the Department and subsequently of The Council of The College.

Courses offered in Part IV, Additional Related Studies

455.28 *Educational Issues in Perspective* (2 hours). The intention is to seek an understanding of basic – *ipso facto* contemporary – issues in education through examining the writings of selected educators of the past and present. Students will have a voice in selecting themes and authors, and will be expected to share in the reading, the presentation of papers, and the exchange of views through class discussion upon which the success of this course will largely depend.

455.11 *History of Education: A Reading-Discussion Course* (2 hours). For a course of this kind enrolment is limited to seminar proportions. Students are invited to share the reading and subse-

quent discussion of selected influential educational writings by famous or well-known writers, past and contemporary. The intention is to learn from direct sources and to see current developments in this perspective.

455.33 *Marxist Educational Theory* (2 hours). This course will be given in the form of a one-hour lecture and a one-hour question and discussion period each week. The first half will concentrate on basic writings of Marx, Engels, and Lenin. The second half will deal with Makarenko, Krupskaya, Lunacharsky, and Kalinin. There will be no formal examination in this course, but students will be required to submit a major paper on some aspect of Marxist educational theory in discharge of their obligation to show competence.

58. Home Economics Program for the Intermediate Certificate

428 *Home Economics* (8 hours). The development of Home Economics in Ontario schools; present trends, values, aims; responsibilities of the Home Economics teacher for curricular and extra-curricular programs.

Curricula: materials, procedures, content.

Teaching methods and techniques currently applied in this field.

Evaluation: objectives and materials.

The Home Economics classroom; selection, arrangement and care of furnishings and equipment.

Records, budgets, regulations.

Each student will participate in a program of individual and group studies of problems of families and communities, and problems of pupils and teachers, involving professional reading and field experiences.

528 *Seminars in Home Economics* (2 hours). For Type A candidates in Home Economics.

A study of Home Economics education as it relates to the Canadian family, with emphasis on readings in current literature and discussions on basic problems of Home Economics teaching. Students will become familiar with resource materials, with ideas expressed by outstanding workers in the field, and will develop a strong philosophy needed for potential leadership.

59. Industrial Arts

430 *Industrial Arts* (8 hours). A program which admits to the sequence leading to the Intermediate Certificate in Industrial Arts. Problems presented to develop creative abilities, experimentation, hand and machine skills needed in the production of useful and well designed articles. Theory and practice in drafting; woodworking; sheet and metal work; machine shop practice; electricity; welding.

Method of instruction; class organization of the general shop; philosophy of teaching. Additional practice teaching in Industrial Arts is provided.

atin and Greek

432 *Latin and Greek* (5 hours in Latin, 3 hours in Greek). An examination of methods in various aspects of the teaching of Latin and Greek, including: oral reading of prose (Caesar, Livy, Nepos) and poetry (Virgil, Ovid); morphology; grammar and syntax; derivation; audio-visual aids and interest devices; historical background of prescribed authors.

532 *Seminar in Classics* (2 hours). For Type A candidates in Classics, Latin, Latin and Greek and, in part, Latin and French, English and Latin, and Latin and Italian. An examination of methods applicable to the prescribed courses in Grade 13 Latin and Greek authors for the current year involving a study of adequate translation and of literary appreciation of the prescribed passages; the philosophy of Horace; Hexameter, Elegiac, Sapphic and Alcaic metres.

. Mathematics

434 *Mathematics* (5 hours). A consideration of the place of mathematics in elementary and secondary education; objectives of the mathematics teacher.

Classroom procedures and teaching methods, Grade 1 through Grade 12, of a balanced teaching program including methods designed to obtain maximum student participation in the discovery and development of mathematical concepts; individual, small group and large group participation methods; team teaching; use of multimedia techniques in the mathematics classroom; testing and evaluation; the teaching of Four-year and Two-year classes.

Contemporary trends in mathematics and their implications for the elementary and secondary schools; history and development of mathematics; foundations of algebra and geometry; fundamental concepts of logic; applications of mathematics.

534 *Seminar in Mathematics* (4 hours). For Type A candidates in Mathematics and, in part, Mathematics and Physics.

A consideration of secondary school Mathematics from an advanced point of view; methods of presenting topics of the secondary school Mathematics program with particular emphasis at the Grade 13 level; developments in Mathematics and the implications for senior secondary school Mathematics programs; curriculum development; organization and administration of the secondary school Mathematics department.

Course offered in Part IV, Additional Related Courses

455.23 *Research Project in Mathematics Education* (2 hours). A study in depth of a selected problem in mathematics education involving a combination of seminar, laboratory work and field experience. This study is intended for students who are primarily interested in the teaching of mathematics. Enrolment is limited.

62. University of Toronto Course in Mathematics

303 *Mathematics* (3 hours). An introduction to a higher Mathematics including a study of some secondary school topics from an advanced point of view. This course is open to students having at least 12 credits in university Mathematics.

NOTE: This course in Mathematics is offered to provide particular background pertinent to the teaching of secondary school Mathematics. This course carries 3 credits toward qualification for endorsement of the High School Assistant's, Type B, Certificate and for the Type A Certificate.

63. Modern Languages: French, German, Italian, Russian, Spanish

436 *Modern Languages* (4 hours per language)

NOTE: The student should be fully aware that the major portion of the lecturing is done in the language concerned, and that he is expected to use the language in his teaching practice.

METHODOLOGY:

Current aims; specific objectives at secondary and primary levels; curricula; materials.

Procedures; specific techniques in audiolingual presentation; the written language; vocabulary acquisition; inductive approach to language generalizations; teaching literature.

Lesson planning (initial, series, review).

Tests and examinations, both oral and written; administration; marking.

APPLIED PHONOLOGY:

Description of the sounds; intonation; accent; discrimination and production on the part of the learner; standards of phonemic and phonetic accuracy (where pertinent); remedial drills; error detection by the teacher; counselling techniques and practice.

CONVERSATION:

Free and guided discussions; leadership practice.

LANGUAGE PRACTICE:

Current usage, emphasizing the spoken language; laboratory drills with pedagogical bias; testing program. (Additional laboratory time may be required of those in need of remedial work.)

536 *Seminars in Modern Languages* (2 hours for each language).

For Type A candidates in French, French and German, French and Italian, French and Russian, French and Spanish, and, in part, Latin and French, Latin and Italian, English and French, English and German, English and Spanish, English and Russian, and Latin and Spanish.

Study in depth at all levels, as outlined in the Courses of Study and Curricula issued by the Department of Education; stress on methods of presenting work at the Grade 13 level.

For Type A candidates in French (2 additional hours). Selected topics, such as linguistics, reference works, learning theory, curriculum, resource materials, course organization, leadership, language laboratory hardware.

Courses offered in Part IV, Additional Related Courses

455.01 *Applied Linguistics* (2 hours). Study of different applications of linguistic theories to the teaching of French; special attention to problems of phonemics, morphology, syntax and semantics in connection with the data of structural linguistics. This course is open to any student of French.

455.29 *Culture and Society as it relates to the teaching of French* (2 hours). Historical, social and regional factors, with emphasis on French Canada.

455.02 *Culture and Society in German Language Teaching* (2 hours). Historical, social and regional factors in the teaching of modern German; a laboratory approach.

455.07 *Electronic Aids to Language Learning* (2 hours). Audio-video equipment, including all laboratory types. (This course, largely televised, includes practice at equipment manipulation. It pre-supposes an interest in, but no knowledge of, electronic aids to learning. It is not to be chosen by Type A French II candidates, whose course already covers much of this work; otherwise, it is open to any foreign modern language student.)

455.21 *French at the Elementary School Level* (2 hours). French as a second language from the earliest grades of the elementary school; programs; procedures specific to the age level; audio-visual aids.

NOTE: This course may be chosen by

i a candidate enrolling in the Elementary School option as well as in French;

ii any candidate proceeding to a Type A certificate in French (alone or in combination with another Type A field).

64. Music, nstrumental Part 1 of the gram for the ntermediate Certificate

438 *Music, Instrumental* (6 hours). This is a practical course emphasizing the individual mastery of instruments and methods of class teaching.

538 *Seminar in Instrumental Music* (3 hours). For Type A candidates in Music. An appraisal of current trends at the junior and senior levels; the materials used; the aims of the teacher.

Advanced ensemble techniques; original works or arrangements for the ensemble.

Music, Vocal Part 1 of the ram for the ntermediate Certificate

440 *Music, Vocal* (5 hours). The musical experience; listening materials; sound exploration; manipulation of sound; symbols of music; musical procedures.

Techniques of choral production; conducting; song materials.

540 *Seminar in Vocal Music* (3 hours). For Type A candidates in Music. Comparative studies of current aesthetics and practices; advanced choral techniques; vocal materials; original choral compositions; problems in the developing of aural responsiveness to

varied musical expressions; examination of sound manipulation and formal procedures; multi-media presentations.

66. Physical and Health Education

442.1 *Physical and Health Education* (8 hours). Part I of th Program for the Intermediate Certificate:
An introductory course in principles and practices of Physical an Health Education. Emphasis is placed on methods of teaching th physical activities and health materials outlined in the Courses c Study, Grades 7 to 10, of the Ontario Department of Education.

442.2 *Physical and Health Education* (4 hours). Part II of th Program for the Intermediate Certificate:
An introduction to the scientific bases of Physical and Healt Education. The course includes methods and materials for Grade 11 and 12; scientific principles; historical developments; introduc tion to statistical methods; program planning.

442.3 *Physical and Health Education* (4 hours). Program for th Specialist Certificate:
Emphasis is placed on advanced methodology; philosophic an scientific principles; organization and administration of all aspec of Physical and Health Education in the school situation.

542 *Seminar in Physical and Health Education* (10 hours). Fo Type A candidates in Physical and Health Education.
The Seminar is concerned with: educational concepts relative t Physical and Health Education; scientific principles relative t human movement; organization and administration of all phas of the secondary school Physical and Health Education progra advanced methodology and teaching techniques.

Courses offered in Part IV, Additional Related Courses

455.04 *Current Health Problems in North American Society* (hours). Survey course including lectures and seminars related such health areas as cardiovascular disease, mental health, air a water pollution, consumer health, drugs, and sex education.

455.15 *Outdoor Education* (2 hours). An introductory cour emphasizing the use of the outdoor environment as an educatio media. An interdisciplinary program which includes lectures a seminars and devotes a considerable amount of time to field wo

67. Political Science

444 *Political Science* (4 hours). Aims and values of Politi Science in secondary school; the prescribed course; teaching ganization and methodology; individual assignments; relationsh to History and to current events; books, periodicals and oth resource materials; examinations and evaluation.

544 *Seminar in Political Science* (1 hour). For Type A candida in Political Science.
Aims of teaching Political Science at the secondary school lev the scope of the subject; methods of teaching comparative gove

ment and politics; the choice of materials, their organization and lesson planning for the Grade 12 course in World Politics; the Grade 10 course in Canadian Government; content and method for Four-Year Programs; enrichment techniques for gifted students; source materials in books, paperbacks, periodicals, pamphlets, etc.; techniques of discussion and the conduct of meetings; relationship of Political Science to History and other secondary school subjects; testing and examinations; the qualities of a specialist; the history of Political Science as a study.

ychology and Sociology

446 *Psychology and Sociology* (4 hours). The value and objectives of the secondary school course 'Man in Society'; planning; methods of presenting various areas of the course; demonstrations and discussion of specific techniques; relationship of 'Man in Society' to other secondary school subjects and to Guidance

546 *Seminar in Psychology and Sociology* (2 hours). For Type A candidates in Psychology and Sociology.
The seminar concerns itself with objectives, content and teaching methods for certain areas of the course 'Man in Society'; the rôle of the specialist in the secondary school.

69. School Librarianship

448 *School Librarianship* (12 hours). Basic training for those who may wish to serve as secondary school librarians.
Instruction in the School Media Centre Collection with particular attention to recreational, biographical, scientific and basic reference materials; School Media Centre Program and Administration; Organization of Materials in the School Media Centre, with laboratory periods for practice; Seminars for discussion of materials and student presentations.
As enrolment in this course is limited, candidates will be selected on the basis of a personal interview with a member of the faculty of the School Librarianship Department. Candidates accepted for School Librarianship should consider selecting course 455.06 Educational Media, as their Additional Related Course.
This course in School Librarianship is Part I of a two-part program leading to the Intermediate Certificate in School Librarianship. The course cannot be completed during the One-Year High School Assistant's Program but requires for the Intermediate Certificate a summer session subsequent to one year of successful experience in a school library.

70. Science

450 *Science* (4 hours). The rôle of Science in Elementary and Secondary Education; the aims and objectives of Science; Science curriculum design; unit planning and lesson planning; a study of representative portions of contemporary Science courses; an examination of the various approaches to the teaching of Science; procedure and methods used to obtain maximum student interest

and participation; recognition of individual student differences; th use of audio-visual aids in Science teaching; source materials; th purchase, maintenance and use of equipment; testing and evaluatio

Courses offered in Part IV, Additional Related Courses

455.09 *Environmental Studies in Science* (2 hours). This cours consists chiefly of the development of environmental studies tha can be performed by secondary school students of Science. Area of study include ponds, streams, forests, grasslands, wetlands, san dunes, soils, and environmental pollution. Field experience is pro vided. A background in ecology is desirable.

550 *Seminars in Science.* The methodology and content of th Science programs in the Senior Division; the organization of th Science programs; the rôle of the specialist teacher and the Depar ment Head.
550.01 Seminar in Biology (2 hours)
550.02 Seminar in Chemistry (2 hours)
550.03 Seminar in Physics and, in part, Mathematics and Physic (2 hours)

71. Theatre Arts

452 *Theatre Arts* (9 hours in addition to regular evening an weekend workshop sessions). An introductory course dealing wit the philosophy and practice of Drama in Education: The purpos of curricular and extra-curricular drama; creative drama; directio production; study in the imaginative concepts and structures of th aural and visual media; planning developmental programs.
This course consists of group projects frequently culminating performance.
Because of the nature of Theatre Arts, class size is limited.

552 *Seminar in Drama* (2 hours). For Type A candidates English and Drama. An individual research project concerni Drama in Education selected by the candidate in consultation wi the Theatre Arts Department.

Bachelor of Education Degree Program for Graduates

2. Bachelor of cation Degree Program for duates of the -Year Course prior to 1970

Bachelor of Education Degree Program for graduates of the one-year course prior to May, 1970, leading to the Interim High School Assistant's Certificate, Type B. Commencing September, 1970, the Division of Extension, University of Toronto, will offer a program in summer and winter sessions which will enable graduates of the one-year College program prior to May, 1970, leading to the Interim High School Assistant's Certificate, Type B, to qualify for the Bachelor of Education Degree.

PROGRAM: A candidate must complete two of the courses in the present one-year program leading to the Bachelor of Education Degree, namely:

a one course selected from a list of offerings in *Part II, Educational Theory,*

b one course selected from a list of offerings in *Part IV, Additional Related Courses.*

NOTE:

i The summer sessions, beginning in 1971, will be of six weeks' duration.

ii The course in each subject will be thirty class hours.

iii A candidate may take one or two courses in winter or summer session.

iv It may be necessary to limit enrolment in certain courses.

v A course will not be offered unless sufficient candidates apply.

Admission Requirements: A candidate must submit to the Secretary, Division of Extension, proof of:

a graduation from *The College of Education* in a One-Year High School Assistants' program, Type B, prior to May, 1970;

b possession of the Permanent High School Assistant's Certificate.

Enquiry and Application: The Secretary, Division of Extension, University of Toronto, 84 Queen's Park Crescent, Toronto 181.

One-Year Programs for Certificates in Technical Education and Industrial Arts
(A) Vocational or Occupational Certificates

Candidates with suitable academic standing and wage-earning experience may enter a One-Year Program leading to a Vocational Certificate or an Occupational Certificate (Practical Subjects).

3. Vocational Certificates

Interim Vocational Certificate, Type B. The basic certificate is the Interim Vocational Certificate, Type B. It qualifies the holder for five years as a teacher in the Vocational subject designated on his certificate.

A Permanent Ordinary Vocational Certificate may be requested of the Department of Education upon the completion of two years' successful teaching experience in a secondary school in Ontario.

Interim Vocational Certificate, Type A. The higher certificate is the Interim Vocational Certificate, Type A. It qualifies the holder for five years as a teacher in the Vocational subject designated on his certificate.

A Permanent Vocational Specialist's Certificate may be requested of the Department of Education upon completion of two years' successful experience in a secondary school in Ontario in the subject designated on the certificate. The Type A Certificate may qualify the holder to become a Technical Director in a secondary school.

Occupational Certificates

Interim Occupational Certificate, Type B (Practical Subjects). The basic certificate is the Interim Occupational Certificate, Type B (Practical Subjects). It qualifies the holder for five years as a teacher in Occupational subjects.

A Permanent Occupational Certificate (Practical Subjects) may be requested of the Department of Education upon completion of two years' successful experience in a secondary school in Ontario.

Interim Occupational Certificate, Type A. The higher certificate is the Interim Occupational Certificate, Type A. It qualifies the holder for five years as a teacher in Occupational subjects.

A Permanent Occupational Specialist's Certificate may be requested of the Department of Education upon the completion of two years' successful experience in Ontario. This Certificate may qualify the holder to become a Director of an Occupational Department.

75. General Conditions of Admission

An applicant for admission to the One-Year Program leading t certificates in Vocational, Occupational, or Industrial Arts mus make application, not later than August 3, to the Director of th Department of Technical and Industrial Arts, 371 Bloor Street West Toronto 181, Ontario, on a form to be obtained from him, and sha submit with the application, on forms also to be supplied by th Director:

A certificate of birth

If not born in Canada, the candidate must submit a certificat from a competent authority that he is a Canadian citizen or ha landed immigrant status or has applied for Canadian citizenship.

Age limits

For the Interim Vocational course, male applicants shall be at leas 23 years of age; female applicants shall be at least 21 years of age This is in accordance with a Department of Education requirement See the Department of Education Act, 1954, Section 11, (1) (c) A candidate for admission to The College of Education is require to produce evidence of a negative tuberculin test reading or ches x-ray taken within the preceding year.

76. Requirements for Admission to Program for the Interim Vocational Certificate, Type B

To this program may be admitted Applied Science graduate (engineers), graduates of Polytechnical Institutes or Colleges o Applied Arts and Technology, and skilled tradesmen.

Engineers

An applicant shall be the holder of a degree from the Faculty o Applied Science of an approved university, and shall submit stat ments to prove not less than two years' subsequent experience i the field of his major subject.

Technologists and Technicians

An applicant shall hold a three-year diploma from an approve program offered by a Polytechnical Institute or College of Applie Arts and Technology, which requires Ontario Grade 12 standi as one of the conditions for admission. He must also docume three years of acceptable work experience.

Skilled Tradesmen

An applicant is required to give evidence of a minimum academ education of Grade 12, Ontario, and approved Trade Training a Experience, generally seven years.

The training or apprenticeship required shall be that demanded f journeyman's qualifications in the trade concerned. Special traini obtained in an approved day vocational school will be taken in account in considering the period of training. An applicant sh submit statements from the persons or firms under whom they we trained, showing the length of the training period and the natu of the work.

The experience required shall be several years of wage-earning journeyman trade experience with reputable firms, and shall be such as to show that the applicant is a skilled craftsman, competent in the main branches of the trade concerned, and familiar with its recent development. The length of the journeyman experience depends upon the nature of the trade. Documentary evidence of experience in the trade in approved shops shall be furnished by the applicant.

An applicant for the Interim Occupational Certificate, Type B (Practical Subjects), shall furnish proof of wage-earning experience over at least seven years and involving at least three trade areas.

In calculating the total years of wage-earning experience and/or training, only those years subsequent to the date of the highest academic attainment used in the calculation can be credited unless the academic program of the candidate was interrupted for a number of years during which he was engaged in such wage-earning activity.

NOTES:

1 In all cases the name of the degree, diploma, or apprenticeship must correspond with both the nature of the wage-earning experience and the subject to be taught.

2 A minimum of two years of Canadian wage-earning experience is required.

. Requirements r Admission to he Program for the Interim Vocational Certificate in me Economics

To this program may be admitted graduates with satisfactory standing in the three-year Secondary School Home Economics teaching option of the Ryerson Polytechnical Institute or equivalent. Wage-earning experience is not a prerequisite for admission to this program.

NOTES:

1 Home Economics is offered in the One-Year Program only.

2 Applicants should pay particular attention to the fact that no Vocational Type A Certificate is offered in Home Economics. All candidates must obtain an acceptable B.A. degree before they are eligible to proceed to higher certification through the High School Assistants' Program.

. Requirements r Admission to rogram for the rim Vocational r Occupational tificate, Type A

This program is offered to graduates of a Faculty of Applied Science or a Faculty of Architecture or graduates holding the B.SC.N. from an approved university with at least 66% in the final and one other year.

Each candidate shall:

1 submit evidence of not less than two years of approved wage-earning experience in the field of his major subject;

2 be required to take the courses of the Program for the Type B Certificate, and to obtain a grading of 66%;

3 take additional courses in the organization, administration, and

supervision of vocational schools, educational measurements, curriculum development, comparative education, and philosophy of education.

9. Program for the Interim Vocational or Occupational Certificate, Type B

The program consists of three parts:

PART I:

Educational Psychology, Administration and Program Development, English, Mathematics, History of Vocational Education, Principles of Teaching and Classroom Management. Technical Subjects: subject analysis, shop plan, equipment list, yearly budget course of study, Practical Laboratory.

PART II:

Applied Teaching Techniques, Observation and Practice Teaching. Observation and Practice Teaching is a program of from ten to twelve weeks. The program is conducted in Ontario secondary schools. Assignment of students to practice schools is made outside as well as within the area of Metropolitan Toronto. Candidates entering the course must be able and willing to accept practice teaching assignments to those schools selected by the Director and Associate Director of Practice Teaching. Candidates absent from regular practice teaching weeks may be required to do other assignments later in the session.

PART III:

Technical Proficiency Examination.

Every applicant shall be required to pass an examination designed to test his attainments as a skilled worker in the subject concerned. The examination shall be on the fundamental principles, operations, processes and skills of the subject, and shall be in two parts: written and practical. In the practical examination, the applicant will be required to show his skill in a performance test.

Details of Courses in the Program for the Interim Vocational or Occupational Certificate, Type B

NOTE: In each case, the numeral in brackets indicates the number of lecture hours per week.

Administration and Program Development

461 *Administration and Program Development* (1 hour). The teacher's rôle as a professional person; responsibilities to students, to the school and to society; professional relationships and attitudes. The teacher's rôle in the administrative framework of the school; organization of education systems, provincial and local; powers and duties of the various educational authorities; Education Acts and Regulations of the Province of Ontario.
Special reference to professional organizations, teacher certification, curriculum, types of schools, finance.

81. Educational Psychology

463 *Educational Psychology* (3 hours). Introduction to principles of educational psychology as they apply to the teacher and pupils; motivation; development and adjustment; school discipline; intelligence and its measurement; learning process; mental hygiene; basic principles and current practices in Guidance.

82. English

465 *English* (3 hours rhetoric)
466 *English* (1 hour workshop)

RHETORIC:
An introduction to the methods and patterns of clear and effective writing; relationship between thinking and the composition process; perceptive seeing; organization of stimuli and meaningful transmission of response; rhetorical considerations in the composition of sentences and paragraphs; characteristics and techniques of effective identification, definition, classification, comparison and contrast, illustration, and three types of analysis: functional, process and causal. The planning, evaluation and assignment of compositions of various types is a significant part of this course.

INTRODUCTION TO SEMANTIC PRINCIPLES:
Abstract and concrete terms; problems in definition; characteristics of words; denotation, connotation, language and personality; problems in verbal communication.

ORAL PRESENTATION:
Communicating with an audience; eliminating self-consciousness; voice-improvement; oral reading; phrasing oral questions; brief prepared speeches; evaluating oral presentation; characteristics of effective lesson presentation.
Before beginning this course, some formal preparation may be advisable for candidates who lack command of basic English structure and usage.

83. History and Philosophy of Vocational, Occupational, and Industrial Arts Education

467 *History and Philosophy of Vocational, Occupational and Industrial Arts Education* (1 hour). Designed to acquaint the student with the historical development of education, and the philosophical concepts which underly it.
Basic beliefs and assumptions about reality, knowledge, values and social philosophy will be studied, and contributions made by the educational reformers, Comenius, Rousseau, Pestalozzi, Spencer, Dewey and Whitehead will be examined. Stress will be placed on the influence of these philosophers on current vocational, occupational and Industrial Arts practices so that a proper perspective may be gained as we examine the various types of education as facets of general education practice.

84. Mathematics

469 *Mathematics* (2 hours). Introduction to mathematical structures involving a review of the basic number systems; fundamental concepts of logic, graphing in two- and three-dimensional space; vectors and their application; study of relations; defining equations and inequations of relations; introduction to the basic ideas of calculus by a consideration of velocity and rate of growth problems; a system of equations and inequations; introduction of linear programming.

85. Principles of Teaching and Classroom Management

Principles of Teaching and Classroom Management
471 *Aims and Philosophies of Education* (3 hours)
1 Aims of Education
2 A Taxonomy of Educational Objectives:
- **a** The Cognitive Domain
- **b** The Affective Domain
- **c** The Psychomotor Domain

3 Profile of an Ideal Teacher
4 Human Relations in the Classroom: Teacher Attitudes
5 Professional Ethics
6 Public Relations
7 The Preparation of Instructional Objectives
8 Evaluation of Teaching

472 *Applied Teaching Techniques* (3 hours)
1 Analysis of Formal Lesson Types

2 Lesson Planning
3 The Art of Questioning
4 Inductive and Deductive Reasoning
5 The Teaching and Learning of Concepts and Principles
6 The Teaching and Learning of Skills
7 Problem Solving, Creativity, and Discovery Learning
8 Audio-visual aids in Teaching
9 Individual Instruction
10 Group Dynamics in Teaching
11 Practice Lessons

473 *Learning* (3 hours)

1 The Nervous System: Relation to Learning
2 The Learning Process: Definitions, Theories, and Types of Learning
3 Efficient Study Methods
4 The 'Laws of Learning'
5 Direct and Indirect Experiences
6 Habits and Habit Formation
7 Motivation
8 Individual Differences
9 Economy and Techniques of Learning: Making Learning Efficient

474 *Organization and Management* (3 hours)

1 Routine Duties
2 Tests and Examinations; Construction and Administration
3 Statistical Analysis of Scores
4 Measuring and Recording Pupil Progress
5 Preparation of Instructional Materials: Instruction Aid Sheets; Audio-Visual Media
6 Discipline
7 Homework and Notebooks
8 Team Teaching

86. Technical Subjects

Technical Subjects (2 hours)

479 *Subject Analysis*

480 *Course of Study*. Study of the work of the skilled craftsman to determine the teachable content of each trade or calling. Analysis of the subject to determine the skill, and the trade, technical and concomitant knowledge of the skilled worker; selection of instructional materials and arrangements into groups according to learning difficulties; selection of projects to be used to fit the order of the course of study; determination of related mathematics, science, drawing and auxiliary information needed in each project; preparation of the course of study; unit courses.

481 *Preparation of a model shop plan*

482 *Preparation of an equipment list and budget*

87. Vocational Home Economics

NOTE:

For details of Principles of Teaching and Classroom Managemen Educational Psychology, Administration and Program Developmen History of Vocational Education, see Details of Courses for th Interim Vocational Certificate, Type B. (See Sections 80, 81, 83, 85.

483 *Methods of Teaching Home Economics* (10 hours). Phil sophy and Techniques of Teaching:

History of Home Economics in Ontario schools; the option pr gram; Home Economics curriculum related to the fundament principles, practices and standards in home and family living. U of the Ontario Curriculum guides; planning lessons and unit Teaching techniques and instructional materials. Problems organization; equipment, texts and references. Evaluation, record budgets, regulations.

APPLIED METHODS:

Use of special teaching techniques in preparation and teaching selected lessons suggested in the Ontario Curriculum guides Home Economics. Use and preparation of instructional material

NOTE:

Candidates in Vocational Home Economics will be required t attend provincial schools for Observation and Practice Teaching Home Economics classes for ten weeks during the session. Studen who are absent from regular practice weeks may be required to d other assignments later in the session.

88. Additional Related Course

455.13 *Introduction to Vocational, Occupational, and Industri Arts Education* (2 hours). Types of certificate, the admissio requirements, history, philosophy, and the means of realizing th aims of these three types of education.

(B) Industrial Arts

ndustrial Arts Certificates

Candidates with suitable academic standing and an Ontario Elementary, High School Assistant's or Vocational Teaching Certificate may enter a One-Year Program leading to an Industrial Arts Certificate.

Interim Intermediate Industrial Arts Certificate

The basic certificate is the Interim Intermediate Industrial Arts Certificate. It qualifies the holder for five years as a full-time teacher of Industrial Arts in Divisions up to and including the Senior Division.

A Permanent Intermediate Certificate may be requested of the Department of Education upon completion of two years' successful experience in an elementary or secondary school in Ontario.

Interim Specialist Industrial Arts Certificate

The higher certificate is the Interim Specialist Industrial Arts Certificate which is valid for five years. The holder may ask the Department of Education for a Permanent Specialist Industrial Arts Certificate upon the completion of two years' successful experience in Ontario in Industrial Arts teaching.

90. General Conditions of Admission

General Conditions of Admission

An applicant for admission to the One-Year Program for Certificates in Technical Education and Industrial Arts must make application, not later than August 3, to the Director of the Department of Technical and Industrial Arts, 371 Bloor Street West, Toronto 181, Ontario, on a form to be obtained from him, and shall submit with the application, on forms also to be supplied by the Director:

A certificate of birth

If not born in Canada, the candidate must submit a certificate from a competent authority that he is a Canadian citizen or has landed immigrant status or has applied for Canadian citizenship.

A candidate for admission is required to produce evidence of a negative tuberculin test reading or chest x-ray taken within the preceding year.

91. Conditions of Admission, the Interim Intermediate Certificate

An applicant shall submit:
1 a basic Ontario teaching certificate.

NOTE:
Every teacher of Industrial Arts in an elementary school must hol an Elementary School Teacher's Certificate in addition to his In dustrial Arts Certificate.
If a sufficient number of applicants apply a special half-year cours beginning in January will be offered to those candidates who have
1 Successfully completed Parts I and II of the Elementary Industria Arts Summer Program and Part I of the Industrial Arts Super visor's Summer Program with a minimum of a B standing in th latter
or
2 Successfully completed Parts I, II and III of the Elementar Industrial Arts Summer Program with a minimum of a B standin in Part III
or
3 Successfully completed Parts I (seven-week course) and (seven-week course) of the Elementary Industrial Arts Summe Program with a minimum of a B standing in Part II.

92. Conditions of Admission, the Interim Specialist Certificate

An applicant shall:
1 hold an Intermediate Certificate in Industrial Arts with a standing; and
2 subsequently, have at least one year of successful teaching i the field of Industrial Arts, as verified by the regional superinten dent concerned; and
3 show evidence of having obtained not fewer than seven Grad 13 credits or approved equivalents, including two in English. It recommended that the candidate include papers in Mathematic and Science.

93. Program for the Interim Intermediate Certificate

Industrial Arts, Intermediate

PART I: Laboratory Experience: material science; design technology environmental design; fabrication and production; Philosophy an Methodology; Curriculum Development; History of Industrial Arts Guidance; Educational Psychology.

PART II: Observation and Practice Teaching:
Each candidate is given at least three weeks in a practice schoo His teaching progresses from individual and group instruction t complete charge of routine duties and class instruction. If possible the candidate is sent to the general shop in an elementary school, junior high school, and a collegiate institute.

PART III: Performance Test:
See Section 96.

Details of Courses in the Program for the Interim Intermediate Industrial Arts Certificates

487 *Curriculum Development* (1 hour). A study of the problems involved in developing the program and environment for teaching industrial arts. Lecture and assignment.

489 *Applied Design*

489.1 *Design Technology* (6 hours). Electricity and Electronics; concepts, applications, power mechanics, and central control of electricity. Lecture and laboratory.
Mechanics: Simple machines and applications; fluid power; basic physics as applied to mechanics. Lecture and laboratory.

489.2 *Design Environment* (4 hours). Introduction to basic elements and principles of visual aspects of the environment, and the process of designing, recording and communicating ideas in two and three dimensions. Lecture and laboratory.

491 *Fabrication and Production* (10 hours). The development of basic skills in the use of hand tools and machines, and in the handling of materials. Areas of study include the processing of natural and synthetic materials. Problem solving techniques are learned as the acquired skills are applied. Lecture and laboratory.

493 *Material Science* (2 hours). The study of the structure and properties of materials related to sources; production and use. Lecture and laboratory.

495 *Philosophy and Methodology* (3 hours). Current educational thought: contemporary aims, problems and practices in education, with particular reference to industrial arts education.
The general purpose of the course will be to present an historical perspective and philosophical insight to help students appreciate modern educational issues. Lecture and seminar.

462 *Administration and Program Development* (1 hour). The teacher's rôle as a professional person; the teacher's rôle in the administrative framework of the school. Lecture.

463 *Educational Psychology*. See Section 81 for content.

94. Program for the Interim Specialist Certificate

Industrial Arts Specialist

PART I: Teaching Subjects

Complete three of:

Architectural Drawing and Building Construction
Communications
Design Education
Electricity I
Electricity II
Mechanical Technology
Metal Fabrication and Production
Plastics Technology
Science Technology
Wood Fabrication and Production

PART II: Educational Theory and Professional Practice

Courses are offered in this area to emphasize the professiona development of teachers so that they may become more efficien intelligent educators with an interest in and understanding of curren educational change.

PART III: Observation and Practice Teaching

Recommendation of Vocational, Occupational and Industrial Arts Certificates

inal Standing

The final standing of students in attendance in the program for the Vocational Certificate, Type B, Occupational Certificate, Type B (Practical Subjects), or programs for the Intermediate and Specialist Certificates in Industrial Arts, shall be determined by the sessional records of Part I, by the records of Part II of the programs concerned, and by the results of examinations of Part III. (See Sections 79 and 93.)

The sessional records in each program represent oral and written exercises, practical work, research reports, frequent tests, and the results of term and final examinations.

A candidate shall pass in each of the subjects listed in the Program of Studies of the program concerned. The pass standard shall be 50% (grade D) of the marks assigned to each subject of Part I and 50% (grade D) of the marks assigned for each division of Part II (Observation and Practice Teaching), and 50% (grade D) of the marks assigned for each section of Part III (Performance test for Industrial Arts or Technical Proficiency Examinations for Vocational Students).

Performance Test

A candidate for the Intermediate Industrial Arts Certificate or the Specialist Industrial Arts Certificate must pass a performance test before being recommended for a certificate.

97. Technical Proficiency Examinations ocational and Occupational

A candidate for the Interim Vocational or Occupational Certificate, Type B, must obtain 50% (grade D) in each of the practical and theory portions of the Technical Proficiency Examinations.

Supplemental Examinations

A candidate for the Vocational or Occupational Certificate Type B (Practical Subjects) or the Intermediate or Specialist Certificate in Industrial Arts who passes in Part II (Observation and Practice Teaching) and fails with a score not lower than 40% in not more than two subjects of Part I shall be exempted from further attendance. He may complete his standing for a certificate by re-writing, at an annual examination, the examination(s) in the subject(s) in

which he failed. Supplemental examinations will be held in Augus
If either or both of the two failing scores are lower than 40%, th
candidate shall attend one Summer Session in the subject(s) cor
cerned.
It is the responsibility of the student concerned to apply, not late
than July 1, for permission to write the supplemental examinatior
in which standing is desired.

99. Failure in More than Two Subjects

Candidates who fail in more than two subjects of Part I or i
either division of Part II (Observation and Practice Teaching) sha
be required to attend and successfully complete another session a
follows:
1 Candidates for Vocational and Occupational Certificates sha
attend the Winter and Spring terms of the One-Year Program c
one Summer Session;
2 Candidates for Industrial Arts Certificates who fail in more tha
two subjects of Part I shall attend either the Winter and Sprin
terms of the One-Year Program or one or more Summer Sessior
as The Council of The College directs. Candidates who fail i
either division of Part II (Observation and Practice Teaching) sha
attend the Winter and Spring terms of the One-Year Program.
3 Candidates for the Vocational or Occupational (Practical Sub
jects) Certificates, Type A, who fail in two or more subjects wi
be required to repeat the session concerned.

100. Failure in the Technical Proficiency Examinations

A candidate for the Vocational or Occupational Certificate, Typ
B, who fails in the practical or theory portions of the Technic
Proficiency Examinations shall write a supplemental examinatio
if his average is more than 40% but less than 50%. If his averag
is below 40%, he will be permitted to complete the One-Yea
Program provided his standing in the professional subjects
satisfactory. However, Summer Session students will not be ac
mitted to the Completing Summer Session.

101. Submission of Assignments

Final marks in any subject or for any Vocational, Occupational c
Industrial Arts Certificate may not be issued until all assignmen
have been submitted.

NOTE: As the value of *an endowed scholarship or prize* is dependent on the actual income of the fund, it is possible that the value of certain scholarships and prizes at the time of payment may be less than the amount stated in the Calendar.

. Fellowships

The Province of Ontario Teacher Education Award in the amount of $500 is available to full-time students in the High School Assistants' and Technical and Industrial Arts Departments who are candidates for Department of Education certificates. No application for the award is necessary.

103. Ontario udent Awards gram/Canada nt Loans Plan

Ontario Student Awards Program/Canada Student Loans Plan

This Plan, instituted by the Federal Government in 1964, was introduced to provide loans to supplement the resources of a student and/or the parents where, in the absence of such aid, a student would be unable to pursue a post-secondary education. A student should apply for a loan under this Plan for only the funds needed, over and above those from his own resources and/or those of his family, to enable him to continue his studies. The institution to which application is made will determine the amount of loan required in each case.

Borrowers under this Plan are required to repay principal and to pay interest, but no payments are required so long as the student is in full-time attendance at an eligible institution and for six months thereafter. Interest charges during this period are paid by the Federal Government who also guarantees the loan principal. After the interest-free period, repayment of principal and simple interest charges on the outstanding balance are required in regular monthly payments to the bank from the borrower. The maximum amount which may be advanced under this Plan to one student is $1,000 in one year (ending June 30). The maximum total indebtedness under this Plan is $5,000.

Application should be made in the first instance to the Registrar, The College of Education. If a loan is approved, the institution will issue a Certificate of Eligibility which authorizes the student to make arrangements for the loan with any branch of any chartered bank in Canada.

104. The William Pakenham Fellowship in Education

The late Dr. William Pakenham bequeathed to the University o Toronto the residue of his estate to be used as the governing bod of the University may direct on behalf of the activities of Th College of Education.

Accordingly, a Fellowship in Education has been established fo advanced work either in the University of Toronto or in some othe university approved by the Senate. The Fellowship shall be awarde at such intervals and have such value (usually $2,000) as th Senate on the recommendation of The Council of The College o Education may from time to time determine.

Applicants must be residents of Ontario, holding a Bachelor degree and a teacher's certificate valid in a Canadian province, an must submit a record of professional experience and evidence o ability to make a contribution to education in Canada as a resu of further work.

An application form may be obtained from the Registrar, Th College of Education. Completed applications must be received b March 15.

105. The Pakenham Memorial Prize

As a memorial to Dr. William Pakenham, Dean of The College o Education from 1907 to 1934, the teachers of Ontario have founde an annual Memorial Prize of the value of the interest on $1,000 The Prize will be in the form of books stamped with the Coat o Arms of the University of Toronto, and will be awarded to th student who obtains the highest standing, as reported in the annua returns of The College, in the subjects of Part I of the High Schoo Assistants' Program, Type B, and in Practice Teaching.

106. The Hugh W. Bryan Memorial Prize of The Ontario Secondary School Teachers' Federation

The Ontario Secondary School Teachers' Federation has founde an annual scholarship of the value of $100 in memory of a forme President of the Federation, Dr. Hugh W. Bryan. The prize will b awarded by the Scholarship Committee of the Federation at th close of each session and after receipt of a report from The Counc of The College of Education, to the student in regular attendanc throughout the session in the High School Assistants' Program wh has shown 'the most outstanding qualities of scholarship, teachin ability, and character.'

107. The Polymer Corporation Scholarship in Science and/or Mathematics

The Polymer Corporation Limited of Sarnia, Ontario, has estab lished a scholarship of $750 to increase the supply of teacher qualified to teach Science or Mathematics in secondary schools The applicant must be a resident of the Province of Ontario wh has graduated in the past five years with a degree in Arts or Scienc from a Canadian university. The applicant must have Canadia citizenship or have declared intent to obtain this.

Candidates must be prepared to teach Mathematics and/or Scienc in a secondary school in Canada upon completion of the 1970–7 regular session of The College of Education, University of Toronto

Application forms are available from the Registrar, The College of Education, 371 Bloor Street West, Toronto 181, or from the Secretary, Scholarship Committee, Polymer Corporation Limited, Sarnia, Ontario. Completed applications must be received not later than May 15, by the Secretary, Scholarship Committee, Polymer Corporation Limited.

108. The onfederation Association cholarship in thematics or Mathematics and Physics

The Confederation Life Association has established a scholarship of $500 to attract honour graduates in Mathematics or in Mathematics and Physics into the teaching profession. The applicant must be a graduate of a Canadian university and must agree to attend the 1970–71 session of The College of Education, University of Toronto, to qualify for a Type A Certificate in Mathematics or Mathematics and Physics.

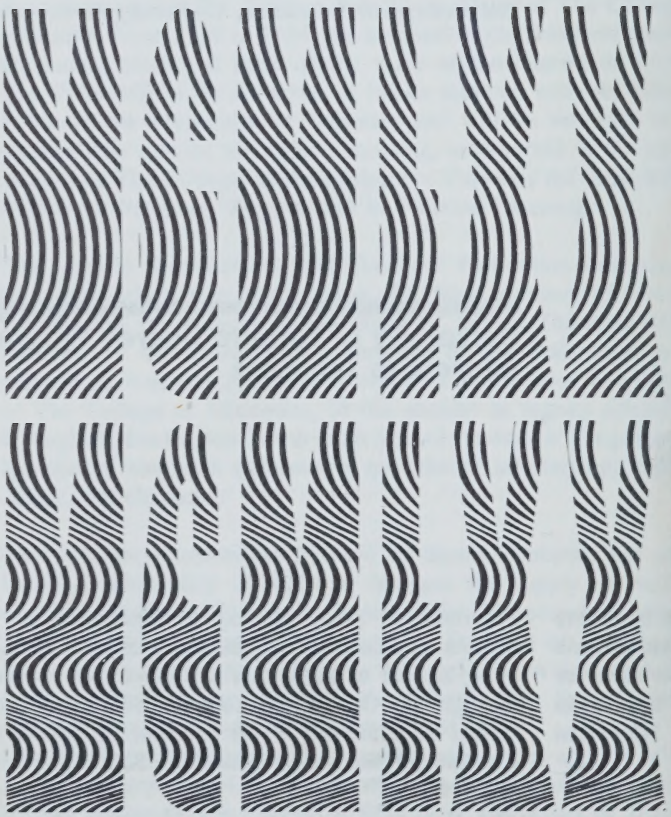
Application forms are available from the Registrar, The College of Education, 371 Bloor Street West, Toronto 181, or from the Head of the Department of Mathematics or Physics at the student's university.

The completed application forms must be received by the Registrar, The College of Education, University of Toronto, before May 15.

University of Toronto Degree Programs of Interest to Teachers

09. Graduate rees, Ontario Institute for Studies in Education

Programs of study leading to University of Toronto graduate degrees of Master of Education, Master of Arts, Master of Philosophy, Doctor of Education and Doctor of Philosophy are available through the Ontario Institute for Studies in Education. Enquiries should be addressed to the Director of Graduate Studies, Ontario Institute for Studies in Education, 252 Bloor Street West, Toronto 181.



0. Discontinuon of the High ol Assistants' Type B mer Sessions

The High School Assistants' Type B, Summer Sessions, established in 1955 as an emergency measure, have been discontinued for recent graduates.

The Completing Seven-Week Summer Session, Type B, however, will be provided in 1970 for those candidates who successfully completed the Initial Eight-Week Summer Session of 1969. (See Section 111.)

1. High School Assistants' Completing Seven-Week mmer Session

A Seven-Week Summer Session for the High School Assistant's Certificate, Type B, will be held from June 29, 1970, to August 14, 1970, for candidates who qualified for Temporary Secondary School Teachers' Certificates on completion of the Initial Eight-Week Summer Session of 1969, and who are recommended for admission by the principal and regional superintendent concerned. The program of studies will consist of courses in principles and procedures of teaching the optional subjects of the Initial Program, Educational Psychology, and the History, Philosophy, Sociology of Education.

A candidate who fails in more than two subjects shall attend the Summer Session described in Section 112 with a change of optional subjects.

A candidate who fails in more than two subjects of the Completing Program (of which only one may be a course in the principles and procedures of teaching) may qualify for the Type B Certificate under conditions outlined in Section 30.

2. High School stants' Type B mmer Program Teachers with Professional Education

A summer program leading to the High School Assistant's Certificate, Type B, will be held from June 29, 1970 to August 7, 1970. Examinations will take place during the last week of the course.

This course is open to a candidate who holds a university degree approved for admission to the High School Assistants' Course, Type B, and

i who, after failing in a Completing Course or a One-Year Program of a College of Education, has been given permission by the Dean to attend this course with a change of options,

OR

ii who holds an Interim Ontario Elementary School Teacher Certificate, Standard 4,

OR

iii who holds a Permanent Elementary School Teacher's Certificat Standard 4, and who does not have a contract with a secondar school board,

OR

iv who holds an acceptable teaching certificate other than (i or (iii) above,

OR

v who is eligible for a secondary school Letter of Standing but wh wishes to familiarize himself with the Ontario school system.

A candidate who fails in more than two subjects shall re-attend Summer Session for Teachers with Professional Education anoth year.

A candidate who fails in not more than two subjects of the progra (of which only one may be a course in the principles and proc dures of teaching) may qualify for the Type B Certificate und conditions outlined in Section 30.

Candidates are required to produce evidence of a negative tubercul test reading or chest X-ray taken within the preceding year.

The program will consist of course offerings of the Department Administration and Program Development and an appropriate pa tern of two secondary school subjects chosen from the followin English, History, Geography, Latin, French, German, Mathemati or Science. In the case of a degree which will not support the choi of *two* of the above options the candidate may choose Physical ar Health Education or Theatre Arts as a second optional subject. Th Physical and Health Education course leads to Part I of the Inte mediate Certificate in Physical and Health Education. The Theat Arts course leads to the Theatre Arts Certificate.

If a sufficient number of teachers apply a special course will b offered in The College of Education with Business and Commer as two subjects or options, i.e., Typewriting *and* either Accountanc Marketing or Secretarial Science. For further information plea write to Professor A. P. Seggie, The College of Education, 371 Blo Street West, Toronto 181.

NOTE:

See Section 17 regarding *Interchange of Ontario Teaching Certificate*

113. High School Assistants' Type A Seminars

A special Summer Session of six weeks, beginning on June 2 1970, will be offered to provide the opportunity for teachers wh hold a High School Assistant's Certificate, and who possess th necessary academic qualifications, prescribed in Department Education Circular 649, to obtain an Interim High School Assis ant's Certificate, Type A. On July 1, 1969, Type A agreemen between the Department of Education and the universities termi ated. Candidates for Type A courses will be admitted on the bas

of transcripts evaluated by the Committee on Advanced Standing in accordance with the provisions of Department of Education Circular 649. It should be observed that this change in procedure will not affect students who enrolled in Ontario universities in September 1965; it will affect those who enrolled in or after September 1966.

Professional courses leading to the Type A Certificate in one of the following special fields of scholarship will be offered:

Biology
Chemistry
Classics
Economics
English
English and French
English and German
English and Latin
English and Spanish
English and History
French
French and German
French and Italian
French and Spanish
Geography
History
Home Economics
Italian and Latin
Latin
Latin and French
Latin and Greek
Mathematics and Physics
Mathematics
Music
Physical and Health Education
Physics
Political Science
Political Science and Economics
*Psychology
*Psychology and Sociology
*Sociology
Science
Spanish and Latin

*If sufficient numbers apply.

Applicants must be recommended in their special fields of scholarship and teaching by the Department of Education on the basis of their competence as a classroom teacher of their Type A subject(s) in an Ontario secondary school. If it should prove necessary, an equitable limitation of the enrolment may be made. Preference will be given to teachers holding the Permanent High School Assistant's Certificate. Applications will be considered in the order in which they are received. Applications for enrolment must be made to the Registrar, The College of Education, by April 1, 1970.

114. Home Economics ıer Sessions

Part II of the revised program and Parts III and IV of the former program of the summer courses leading to the Intermediate Certificate in Home Economics will be held in 1970:

PART II (revised program) June 29 to August 14
PART III (former program) June 29 to August 7
PART IV (former program) June 29 to August 7

Admission Requirements:

PART II Elementary Home Economics Certificate based on completion of Part I, revised program
PART III Elementary Home Economics Certificate based on completion of Part II, former program

PART IV Successful completion of Part IV, former program

The summer courses leading to the Intermediate Certificate i Home Economics are being discontinued, and Part I will not b offered in 1970. Teachers who have already received standing i one or more parts of the course may complete requirements fo the Intermediate Certificate according to the following schedule, t be offered at Toronto only:

Year	*Course*	*Requirement for Admission*
1970	PART II (revised program)	Elementary Home Economi Certificate (revised program)
	PART III (former program)	Elementary Home Economi Certificate (former program)
	PART IV (former program)	Successful completion of Pa III
1971	PART III (revised program)	Successful completion of Part (revised program)
	PART IV (former program)	Successful completion of Pa III (former program)

Applications for Parts II, III and IV must be submitted not lat than May 1 to the Head, Home Economics Summer Courses, Th College of Education, 371 Bloor Street West, Toronto 181, Ontari A late fee of $20.00 will be assessed applicants accepted betwee May 1 and June 1. Late applications will be accepted only classes are not filled. No application can be accepted after June These summer courses will not be given after 1971. Teachers wh wish to qualify to teach Home Economics may do so by takir five approved University courses in Home Economics followed b one summer seminar at The College of Education, University Toronto.

Intermediate Program for Graduates with University Credits Home Economics. This seminar will not be offered in 1970.

115. Physical and Health Education Summer Sessions

Separate Summer Sessions in Physical and Health Education w be offered in Toronto for men and women.

Intermediate Summer Sessions

The program leading to an Intermediate Certificate in Physical ar Health Education consists of two Summer Sessions (Intermediat Parts I and II). These will be held from June 29 to August 7, 197 Applicants for admission to the Summer Sessions must hold a Hig School Assistant's Certificate.

Applicants holding an Elementary Physical and Health Educatio Certificate granted under former regulations may be admitted the second Summer Session (Intermediate, Part II).

Specialist Summer Session

The Summer Session leading to the Specialist Certificate will b held in Toronto from June 29 to August 7, 1970.

Applicants for admission must hold an Interim High School Assistant's Certificate or a Permanent High School Assistant's Certificate and an Intermediate Certificate in Physical and Health Education, and have taught for a period of at least one year in a secondary school in Ontario, or in Grade 9 or 10 of an elementary school or a separate school in Ontario, or hold a High School Assistant's Certificate and a Supervisor's Certificate in Physical and Health Education.

Special Summer Session for Teachers of Physical Education for Girls

The Special Summer Session for Teachers of Physical Education for Girls will be held in Toronto from June 29 to August 7, 1970.
Applicants for admission to the Summer Session must hold:
1 a Permanent Elementary School Teacher's Certificate or First Class Certificate;
2 a Secondary School Honour Graduation Diploma or equivalent standing;
3 a contract with an Ontario secondary school Board of Education.
After a satisfactory completion of the program, the candidate will receive from the Department of Education a letter to that effect.

Medical Certificates

Each applicant is required to forward by June 15 a medical certificate from his own physician indicating that he is physically fit to take a Summer Session in Physical and Health Education. Final registrations will not be accepted and students will not be allowed to take part in the Summer Session until this condition has been fulfilled.

Applications

Application forms may be obtained from the Head of Women's Physical and Health Education, or from the Head of Men's Physical and Health Education, The College of Education, 371 Bloor Street West, Toronto 181. Completed application forms must be returned not later than June 1, 1970.

116. School Librarianship ner Sessions

There are three six-week Summer Sessions leading to the Specialist Certificate in School Librarianship. The Intermediate Summer Session, Parts I and II, lead to the Intermediate Certificate in School Librarianship. The third Summer Session leads to the Specialist Certificate in School Librarianship. The three sessions must be taken consecutively. They are offered to meet the greatest need, hence all three are not offered every summer, nor consecutively.
The Specialist Program will be offered in Toronto from June 29 to August 7, 1970. Application forms may be obtained from the Chairman, School Librarianship Department, The College of Education, 371 Bloor Street West, Toronto 181. Application forms must be submitted before May 1, 1970.

Specialist Summer Session:

This summer program will continue the training offered in t Intermediate Program. It will include the following: Contempora Adult Fiction for Young People; Recreational Reading for t Reluctant Reader, School Media Centre Program and Administr tion, Recreational Reading for Grades 7–9, Planning School Med Centre Quarters, Audio-visual Materials, Curriculum-Related M terials in a Selected Subject area.

Applicants for admission to the Specialist Program must:

1 hold a Permanent High School Assistant's Certificate;

2 submit evidence, certified by the principal of the school co cerned, of at least one year of successful secondary school libra experience during a minimum of 15 periods per week, subseque to completion of the Intermediate Program, Part II.

A candidate who successfully completes this Program will recommended for the Specialist Certificate in School Librarianshi

117. Business and Commerce Summer Sessions

Teachers who wish to enrol in any of the following Summer Se sions should write for application forms to the Director, Busine and Commerce Department, The College of Education, 371 Blo Street West, Toronto 181, and should submit the completed for before June 1, 1970.

Intermediate Session, Part I. Summer sessions leading to Part I the Intermediate Accountancy, Data Processing, Marketing Secretarial will be held at Central High School of Commerce, T ronto, for candidates who hold an Elementary School Teache Certificate or a High School Assistant's Certificate.

Subjects Offered:

Typewriting 101 A and B; Typewriting 102; Bookkeeping 111 A a B; Shorthand 121 A and B; Retail Merchandising 131; Introducti to Data Processing 141; Principles of Electronic Data Processi 241; Principles and Practices of Teaching Typewriting 103; Pri ciples and Practices of Teaching Bookkeeping 113; Principles a Practices of Teaching Shorthand 123; Principles and Practices Teaching Merchandising 133; Principles and Practices of Teachi Data Processing 143.

Intermediate Session, Part II

Summer sessions leading to the Intermediate Accountancy, Da Processing, Marketing or Secretarial certificate will be held Central High School of Commerce, Toronto. To these courses m be admitted an applicant who has completed or who is completi subjects for the Intermediate, Part I, course.

Subjects Offered:

Principles and Practices of Teaching Business 153; Business Orga zation 231; Business Machines 201; Machine Mathematics 20 Business Arithmetic 202; Business Law 204; Business Finance 20

Shorthand Practice 221; Office Practice 222; Office Procedures 224; Business Correspondence 225; Economics of Distribution 232; and Consumer Principles and Practices 234.

Specialist Session

Summer sessions leading to the Specialist certificates in Accountancy, Data Processing, Marketing or Secretarial will be held at Central High School of Commerce, Toronto. To these sessions may be admitted an applicant who holds an Ontario High School Assistant's certificate, Type B, and who holds the Intermediate, Part II, of a Business and Commerce certificate or who is completing subjects for one of these certificates, and whose program, approved by the Director, Business and Commerce Department, permits a start on subjects leading to one of the Business and Commerce Specialist certificates.

Subjects Offered:

Accounting 311, 411; Secretarial 321, 421; Marketing 331, 431; Electronic Data Processing 341, 441; Principles and Practices of Teaching Accounting 413; Principles and Practices of Teaching Office Practice 423; Principles and Practices of Teaching Marketing 433; Principles and Practices of Teaching Electronic Data Processing 443; Organization and Supervision of a Business and Commerce Department 453.

Description of courses will be found in section 47.

Credit may be allowed for equivalent university courses previously taken if official transcripts are submitted.

Examinations upplementals

Examination Centres:

a Examinations, including supplementals, in the non-machine subjects based on the requirements listed below will be held in May at The College of Education, or, if sufficient candidates apply, at approved local centres. Requests to write the examinations should be made to the Director, Business and Commerce Department, before March 1, in the year of writing. The timetable of examinations will be mailed to candidates whose application has been accepted in April, in the year of writing. Late applicants will be required to write examinations in Toronto.

b Machine subject examinations based on the requirements listed below will be held on May 2, 1970 at Port Arthur, Sault Ste. Marie, North Bay, Ottawa, Windsor and Toronto only. The machine subjects are: Typewriting 101; Business Machines 201; Machine Mathematics 202; Office Practice 222; Office Procedures 224; Shorthand Practice 221; Business Correspondence 225; Secretarial 321 and Secretarial 421. The timetable will be mailed in April.

Supplementals:

A candidate who has failed to obtain standing at a previous session may try the supplementals. A supplemental may only be tried twice.

Requirements for writing examinations:

A candidate may write an examination when

a Intermediate Part I or II college correspondence courses hav been successfully completed;

OR

b Intermediate Part I or II subjects have been taught by the cand date within the last two years for a minimum of one comple school year as certified by the Principal;

OR

c Official evidence is presented of the successful completion Intermediate Part I or II subjects at a night school course, seco dary school option course, a business college course, or an approv machine company course.

119. Two-Summer Program Leading to the Commercial-Vocational Certificate

Commercial-Vocational Courses of a two-summer sequence w be offered at Toronto in 1970, commencing June 29 and endi July 31. These courses lead to the Interim Commercial-Vocation Certificate, Type B. This certificate is valid in any secondary scho for teaching the commercial subjects named on the certificate.

To these five-week courses may be admitted applicants holding t following degrees, diplomas, or certificates:

1 Graduates of an accredited university with standing acceptab to the Dean who are not eligible for the High School Assistan program may qualify for admission to any one of the cours offered.

2 Graduates of the three-year Secretarial Science Course at t Ryerson Polytechnical Institute may qualify for admission to t Typewriting, Office Practice and Shorthand courses.

3 Applicants holding diplomas as Chartered Accountants, Cha tered General Accountants, and Registered Industrial Accountan may qualify for admission to the Bookkeeping and Accounti course.

4 Applicants who submit evidence that they have obtained a co tract with a secondary school board, or other publicly supporte educational institution, or a contract with an inspected priva school, to teach the business subjects for which they are certifie

Applicants proceeding toward a Commercial-Vocational Certificat Type B, may choose one of the following courses:

1 Bookkeeping and Accounting

2 Typewriting and Office Practice

3 Typewriting, Office Practice and Shorthand

The course followed determines the skills or subjects for which t certificate is valid in a secondary school.

Subjects of Certification

1 Applicants who select the Bookkeeping and Accounting cour will be certified to teach Bookkeeping and Accounting, Recor

keeping, and Business Practice and may also be certified for other related subjects.

2 Applicants who select the Typewriting and Office Practice course will be certified to teach Typewriting, Grades 9 and 10, and Office Practice. These teachers may also be certified for other related subjects. Teachers who select the Typewriting, Office Practice, and Shorthand courses will be certified to teach these three subjects and may also be certified to teach related subjects. Applicants for any of these courses may be required to try qualifying examinations in the field of their choice at the option of the Admissions Committee. All applications for these courses must be received prior to June 1.

Applicants who are accepted for these courses and who, after one year's successful teaching, complete a second summer course in 1971, will be granted an Interim Commercial-Vocational Certificate, Type B (subjects named), valid for five years. A permanent Commercial-Vocational Certificate (subjects named) may be issued after two years of teaching experience if the quality of the teacher's work has been satisfactory and he has completed half of the credits toward an acceptable university degree. Upon completion of the degree, teachers may apply to the Department of Education for an Interim High School Assistant's Certificate, Type B.

Detailed information regarding this course as well as information regarding examinations, should be obtained immediately from the Director, Business and Commerce Department, The College of Education, 371 Bloor Street West, Toronto 181, in order that eligibility for admission may be established before a contract is made with a school board.

ree-Summer ram Leading Commercial- Vocational cate, Type B

Commercial-Vocational Courses of a three-summer sequence will be offered at Ottawa and Toronto in 1970 commencing June 29 and ending July 31. These courses lead to an Interim Commercial-Vocational Certificate, Type B, which is valid in any secondary school for teaching the Commercial subjects named on the certificate. These courses offer preparation in methodology for the subjects of Typewriting, Office Practice, Shorthand, and Marketing, but not for Bookkeeping or Accounting. The second and third summers of this program will be offered for those who complete successfully the work of the previous summer courses.

To these five-week courses may be admitted applicants who submit the following:

a an Ontario Secondary School Honour Graduation Diploma or equivalent, and

b a statement satisfactory to The College of Education, from an employer or employers that the applicant has had at least five years' acceptable office or merchandising experience. Graduates of the Marketing Management or Retail Administration options of the

three-year course at the Ryerson Polytechnical Institute must sul
similar statements testifying to at least two years of accept
merchandising experience subsequent to graduation from
Ryerson Polytechnical Institute, and

c evidence that an applicant has passed the required qualif
examinations in Shorthand, Typewriting, or Marketing, and

d evidence that an applicant has obtained a contract with a se
dary school board, or other publicly supported educational ins
tion, or a contract with an inspected private school, to teach
business subjects in which he has passed the qualifying exam
tions.

Applicants proceeding toward a Commercial-Vocational Certifi
Type B, may choose one of the following courses:

1 Typewriting and Office Practice
2 Typewriting, Office Practice and Pitman Shorthand
3 Marketing

The course followed determines the skills or subjects for which
certificate is valid in a secondary school.

Subjects of Certification

1 Applicants who select the Typewriting and Office Pra
course will be certified to teach Typewriting, Grades 9 and 10,
Office Practice. These teachers may also be certified for c
related subjects. Teachers who select the Typewriting, Office P
tice, and Shorthand courses will be certified to teach these t
subjects and may also be certified to teach related subjects.

2 Applicants who select the Marketing course will be certifie
teach Retail Merchandising, Grades 9 and 10, and Marke
Grades 11 and 12, and may be certified to teach related sub
in the marketing field.

Examination Regulations

Qualifying examinations will be offered at The College of Ed
tion, Toronto, in March, April and May. Prior arrangements
writing examinations must be made through The College of E
cation. Special arrangements may be made prior to May 15
write examinations in designated examination centres outside
ronto. No qualifying examinations are offered after June 1, 1
If the applicant is successful in the summer courses and in te
ing, the employing board will not be required to advertise
position during the teacher's second year of teaching. After
third summer course the successful candidate will receive an Int
Commercial-Vocational Certificate, Type B (subjects named).
certificate will be valid for five years. A permanent Commer
Vocational Certificate (subjects named) may be issued after
years of experience if the quality of the teacher's work has b
satisfactory and the teacher has completed half the credits tov
an acceptable university degree. Upon award of this degree,

teacher may apply to the Department of Education for an Interim High School Assistant's Certificate, Type B, and will be eligible to proceed toward Commercial Specialist Status.
Detailed information regarding this course as well as information regarding examinations should be obtained immediately from the Director, Business and Commerce Department, The College of Education, 371 Bloor Street West, Toronto 181, in order that eligibility for admission may be established before a contract is made with a school board.

ocational and Occupational mer Sessions

Vocational, Type B, Summer Sessions

A Summer Session leading to the Interim Vocational Certificate, Type B, will be offered from June 29 to August 14, 1970 for holders of High School Assistant's Certificates who meet Department of Education requirements for Vocational certification.

Vocational and Occupational Type B (Practical Subjects), Summer Session

The first of two seven-week Summer Sessions leading to the Interim Vocational Certificate, Type B, or the Interim Occupational Certificate, Type B (Practical Subjects), will be offered from June 29 to August 14, 1970.
See Sections 80–87 for details concerning those candidates who can satisfy the admission requirements to the One-Year Program and in addition have a signed contract to teach a Vocational subject or the practical Occupational subjects for the school year 1970–71.

Vocational, Type A, Summer Sessions

Summer Sessions leading to the Vocational Certificate, Type A, will be held from June 29 to July 31, 1970. Parts I and II will be offered by The College of Education.

Occupational, Type A (Practical Subjects), Summer Sessions

Summer Sessions leading to the Occupational Certificate, Type A, will be held from June 29 to July 31, 1970. Parts I and II will be offered by The College of Education.

NOTES:
Applications must be received before June 1, 1970, for any Vocational or Occupational Summer Session mentioned above.
Application should be made to the Director, Technical and Industrial Arts Department, The College of Education, 371 Bloor Street West, Toronto 181.

ndustrial Arts mer Sessions

Program for the Elementary Certificate

A revised program of two seven-week courses will replace the former program of three five-week courses. Part I will be offered from June 29 to August 14, 1970.

Parts II and III of the former five-week program will be offered 1970 from June 29 to July 31.

To Part I may be admitted a teacher who holds a certificate o Letter of Standing qualifying him to teach in an elementary secondary school in Ontario.

To Part II may be admitted a candidate who has successfu completed Part I, and to Part III may be admitted a candidate w has successfully completed Part II of the Elementary program.

Candidates will be able to complete the requirements for t certificate according to the following schedule:

Year	*Former Program*	*Revised Program*
1970	Parts II and III	Part I
1971	Part III	Parts I and II
1972		Parts I and II

Program for the Interim Supervisor's Certificate

This program has been discontinued.

Program for the Interim Intermediate Certificate

Part I will not be offered in 1970.

Parts II and III will be offered from June 29 to July 31, 1970.

To Part II may be admitted a candidate who has successfu completed either Part I of the Intermediate program or who ho an Interim Supervisor's Industrial Arts Certificate.

To Part III may be admitted a candidate who has successfu completed Part II of the Intermediate program.

NOTE: For those candidates who can meet the admission requi ments Part I will be offered in 1971 for the last time, providi sufficient candidates apply.

Candidates will be able to complete requirements for the Inter Intermediate Industrial Arts Certificate through the summer p gram according to the following schedule:

Year	*Courses Offered*
1970	Parts II and III
1971	Parts I and III
1972	Part II
1973	Part III

Program for the Interim Specialist Certificate

Parts I, II and III of the three-summer sequence will be offe from June 29 to July 31, 1970.

To Part I may be admitted a candidate who:

a holds an Interim Intermediate Industrial Arts Certificate, and

b has taught Industrial Arts successfully for one year subsequ to obtaining the Intermediate Certificate as confirmed by Superintendent concerned;

c has seven Grade 13 credits (two of which shall be English or French) or equivalent as approved by The College of Education.
To Part II may be admitted a candidate who has passed Part I.
To Part III may be admitted a candidate who has passed Part II.
Further information, and application forms may be obtained from The Director, Technical and Industrial Arts Department, The College of Education, 371 Bloor Street West, Toronto 181, Ontario.

Occupational ades Summer Sessions

If a sufficient number of candidates make application, Summer Sessions in trade subjects leading to the Occupational Certificate, Type B (Practical Subjects) will be offered in 1970.
To Part I may be admitted holders of Vocational or Elementary Certificates and holders of Industrial Arts Intermediate Certificates, who hold contracts with Boards of Education to teach this subject in composite schools. Acceptable additional work experience is necessary.
To Part II may be admitted candidates who have completed Part I.

Attendance at mer Sessions

Owing to the compact nature of the Summer Sessions, absenteeism cannot be tolerated except for reasons of health and then only for a maximum of five days supported by a medical doctor's statement. This regulation applies to all candidates attending all Summer Sessions.

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60–62 History, Philosophy, Sociology of Education
62 Home Economics
62 Industrial Arts
63 Latin and Greek
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65 Music, Instrumental
65 Music, Vocal
66 Physical and Health Education
66 Political Science
67 Psychology and Sociology
67 School Librarianship
67–68 Science
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The University of Toronto issues the following calendars and other publications concerning courses of instruction given by the University, any one of which may be had on application to the Office of Admissions of the University, or to the Secretary of the Faculty, School or Institute about which information is sought.

General Information	University of Toronto Handbook
Admission Information	Admission Awards Admission Circular
Applied Science and Engineering	Faculty of Applied Science and Engineering Engineering at Toronto – descriptive brochure
Architecture	Faculty of Architecture, Urban and Regional Planning and Landscape Architecture Landscape Architecture – descriptive brochure Graduate Work in Architecture – descriptive brochure
Arts and Science	Faculty of Arts and Science The New Program
Business	School of Business – Graduate Program in Business Administration
Child Study	Institute of Child Study
Dentistry	Faculty of Dentistry Division of Postgraduate Dental Education Division of Dental Hygiene
Education	The College of Education Graduate Degrees in Education*
Extension	Degree Courses in Arts, Science and Nursing Certificate Courses in Business, Public Administration, Criminology Public Health Nursing Courses in the Liberal Arts and Social Sciences (Non-Degree) Business, Engineering and other Professional Courses (Non-Degree)
Food Sciences	Faculty of Food Sciences
Forestry	Faculty of Forestry Diploma Course in Resource Management
Graduate Studies	School of Graduate Studies
Hygiene	School of Hygiene
Law	Faculty of Law
Library Science	School of Library Science
Medicine	Faculty of Medicine, Premedical Course Faculty of Medicine, Professional Course Division of Rehabilitation Medicine Division of Postgraduate Medical Education
Music	Faculty of Music The Royal Conservatory of Music School of Music Year Book General Syllabus Pianoforte and Theory Syllabus
Nursing	School of Nursing
Pharmacy	Faculty of Pharmacy
Physical and Health Education	School of Physical and Health Education
Social Work	School of Social Work

*Write to: Ontario Institute for Studies in Education, 252 Bloo West, Toronto 181, Ontario.

Printer University of Toronto Press

The College of Education University of Toronto Calendar 1971-72

MCMLXXI

MCMLXXII

MCMLXXI

The College of Education
University of Toronto
Calendar 1971–72

In view of increasing costs of supplies and labour, fees, resid dues and other charges set forth in this Calendar are subje changes by the Board of Governors.

Enquiries concerning courses at The College of Education sh be addressed to the Registrar, The College of Educa 371 Bloor Street West, Toronto 181.

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Historical Note

When secondary education in Upper Canada was officially introduce in 1807, qualifications for teachers were ill-defined and professiona training was non-existent. Nevertheless, a surprising number o 'educated gentlemen' found their way into the classrooms of th District Grammar Schools. Unfortunately, the supply of thes superior pedagogues failed to keep pace with the growth of th population and the subsequent increase in schools. But in spite o the difficulties encountered, no serious attempt to provide teache training was made for more than half a century.

Beginning in 1858, a number of experiments involving mode schools and training institutes was conducted with the aim o improving the academic and professional qualifications of teachers None of these endeavours met with any widespread satisfaction.

In 1890, all such operations were abandoned with the founding o a provincial School of Pedagogy in Toronto. Seven years later, thi institution was moved to Hamilton and renamed the Ontari Normal College.

In 1906, the training of secondary school teachers was modifie drastically when Faculties of Education were organized at th University of Toronto and at Queen's University. In Toronto, th Faculty offered professional secondary school courses in Pedagogy In order to improve the practical and experimental aspects of it program, the Faculty established, in 1910, a practice school, th University of Toronto Schools.

This pattern of teacher training continued until after the close o World War I. In 1920, it came to an abrupt end when the Faculty of Education at Queen's was discontinued and the Faculty a Toronto was designated as the Ontario College of Education University of Toronto.

During the period since its inception, the Ontario College of Edu cation has expanded its program, its services, its facilities, and ha added a number of important departments: the Guidance Centre in 1945; the Vocational and Industrial Arts Department, in 1946

the Department of Advanced Academic Recommendation (now known as the Committee on Advanced Standing), in 1957; Educational Media Centre, in 1966; and the Department of Computer Studies, in 1968.

In 1966, the Departments of Graduate Studies and Research were transferred to the Ontario Institute for Studies in Education, with the result that the activities of those departments are now administered by the Institute.

In 1966, a new agreement for the operation of the Ontario College of Education was made between the Minister of Education and the University of Toronto, establishing a College Council and Advisory Board. By the same agreement, the name of the College was changed to *The College of Education, University of Toronto.*

During a period of forty-five years The College was the sole institution in the province for the preparation of secondary school teachers. In 1965, the situation altered with the opening of the Althouse College of Education, The University of Western Ontario. Since then Faculties of Education have been established at Queen's University, The University of Ottawa, and Lakehead University.

Today, The College of Education pursues its traditional rôle of training secondary school teachers and, in addition, trains a number of elementary school teachers. The College also administers the University of Toronto Schools and the Guidance Centre.

Academic Calendar, One-Year Program, 1971

Sept. 13 to Dec. 15	Autumn Term, 1971
September 13 to 17	Registration Week
September 20	Classes begin
October 4	Last date for changing optional subjects
October 11	Thanksgiving Day
November 11	Remembrance Day
December 31	Last day for accepting applications for supplemental teaching and practical tests
January 3 to April 7	Winter Term, 1972
January 20	Last day for receiving the second instalment of fees
March 20 to 25	Mid-term break
March 31	Good Friday
April 10 to May 12	Spring Term, 1972
May 1 to May 12	Final Examinations
May 26	Start of University Commencement
June 25	Last day for accepting applications for supplemental written examinations

Academic Calendar, Summer Session, 1971

to August 6	Business Education Summer Sessions for Intermediate Accountancy, Data Processing, Marketing, and Secretarial, Parts I, II and Specialist
5 to July 9	Business Education, Updating Courses
to August 6	Commercial-Vocational Five-Week Summer Session (C2)
to August 6	Commercial-Vocational Five-Week Summer Session (C3)
to August 6	Commercial-Vocational Completing Session (C2)
to August 6	Commercial-Vocational Teachers, Second and Third Summer Sessions (C3)
o August 6	Counsellor Education Summer Session, Parts I, II, III, IV
August 13	High School Assistants' Summer Session for Teachers with Professional Education
August 13	High School Assistants' Type A Summer Session
August 20	Home Economics Summer Session, Intermediate, Parts II and III
August 13	Home Economics Summer Session, Part IV
August 20	Industrial Arts Summer Session, Elementary, Parts I and II
to August 6	Industrial Arts Summer Session, Elementary, Part III
to August 6	Industrial Arts Summer Session, Intermediate, Parts I and III
to August 6	Industrial Arts Summer Session, Specialist, Parts I, II and III
August 20	Occupational, Type B (Practical Subjects), Professional Program Summer Session, Initial and Completing
August 13	Occupational, Type B (Practical Subjects), Trades Program Summer Session, Parts I and II
to August 6	Occupational, Type A (Practical Subjects), Summer Session, Parts I and II
5 to July 30	Outdoor Education Course
August 13	Physical and Health Education (Women) Summer Session, Intermediate, Parts I and II
August 13	Physical and Health Education (Women) Summer Session, Specialist
August 13	Physical and Health Education (Men) Summer Session, Intermediate, Parts I and II
August 13	Physical and Health Education (Men) Summer Session, Specialist
to August 6	Physical and Health Education for Elementary School Teachers, Summer Session, Elementary, Intermediate Parts I and II, and Supervisor's
August 13	School Librarianship Summer Session, Specialist
August 20	Vocational, Type B, Summer Session, Initial and Completing
August 20	Vocational, Type B, Summer Session, for holders of High School Assistant's, Type B, Certificates
to August 6	Vocational, Type A, Summer Session, Parts I and II

University Administrative Officers 1970–71

President	C. T. Bissell, C.C., M.A., PH.D., D. ès L., D.LITT., LL F.R.S.C.
Assistant to the President	N. S. C. Dickinson, C.D., B.A.
Executive Vice-President (Academic) and Provost	J. H. Sword, M.A., LL.D.
Vice-Provost and Executive Assistant to the President	D. F. Forster, B.A., A.M.
Executive Vice-President (Non-Academic)	A. G. Rankin, B.COM., F.C.A.
Executive Assistant to the Executive Vice-President (Non-Academic)	J. F. Brook
Vice-President (Administration)	F. R. Stone, B.COM., F.C.A.
Secretary of the Board of Governors	D. S. Claringbold
Director of Administrative Services	M. A. Malcolm, B.A.
Director of Physical Plant	F. J. Hastie, B.SC., P.ENG.
Vice-President (Health Sciences)	J. D. Hamilton, M.D., F.R.C.P.(C), D.SC.
Vice-President (Research Administration)	G. de B. Robinson, M.B.E., B.A., PH.D., F.R.S.C.
Director of the Office of Research Administration	Miss S. Dymond, B.A., Q.C.
Vice-President and Registrar, and Secretary of the Senate	R. Ross, M.B.E., M.A.
Executive Assistant to the Vice-President and Registrar, and Assistant Secretary of the Senate	W. Kent, M.A.
Chief Librarian	R. H. Blackburn, M.A., B.L.S., M.S., LL.D.

ting Director of University Extension	E. M. Gruetzner, B.A.
Director of Admissions	E. M. Davidson, B.A.
Director of Student Awards	Miss H. L. Reimer, B.A., B.PED.
dary School Liaison Officer	W. A. Hill
tor of Statistics and Records	J. M. Tusiewicz, B.SC.(ENG.), M.A.SC., M.B.A.
irector of University Health Service	G. E. Wodehouse, M.C., M.D., F.R.C.P.(C), M.R.C.P.
stant Director of University Health Service – Women	Miss F. H. Stewart, B.A., M.D.
r of Career Counselling and Placement Centre	D. Currey, B.A.SC.
Director of International Student Centre	Mrs. K. Riddell, B.A.
ctor of the Advisory Bureau	D. J. McCulloch, B.A., M.D., D.PSYCH., F.R.C.P.(C)
Director of Housing Service	Mrs. M. G. Jaffary, B.A.
Director of University of Toronto Press	M. Jeanneret, B.A., LL.D.
Director of Information	K. S. Edey
Director of Alumni Affairs	J. W. Duncanson, B.A.
Director of Development	R. L. Jones
Warden of Hart House	E. A. Wilkinson, B.A.
ng Director of Athletics and Director of the Department letics and Recreation – Men	A. D. White, B.A., M.ED.
rector of the Department of cs and Physical Education – Women	Miss A. Hewett, B.ED., P.E.

The College of Education Administrative Staff 1971–72

Dean	D. F. Dadson, B.A., B.ED.
Assistant Dean	H. O. Barrett, C.D., B.A., D.PAED., F.O.T.F.
Director of the Department of Technical and Industrial Arts	A. W. Frizzell, B.A.SC., P.ENG.
Assistant Directors of the Department of Technical and Industrial Arts	F. E. Mason, B.A. T. H. G. Luther, M.A., B.ED.
Director of the Department of Business Education	A. P. Seggie, B.A.
Director of the Department of Computer Studies	L. J. La Fave, B.ED., M.B.A.
Director of Practice Teaching	J. W. Dodd, B.A.
Assistant Directors of Practice Teaching	W. G. London, B.A. R. Cairns, B.A.
Associate Director of Practice Teaching (Technical and Industrial Arts)	D. J. Long, B.A.
Director of the Guidance Centre	C. L. Bedal, B.A., M.ED.
Manager of the Guidance Centre	S. J. Totton, B.A.
Director of the Department of Educational Media	D. S. Clee, B.A., M.SC., F.R.G.S.
Director, Committee on Advanced Standing	J. S. Carlisle, B.A., B.PAED.
Librarian	Miss M. Shortt, B.A., M.L.S.
Registrar	Miss A. A. L. Elliott, B.A.
Assistant Registrar	G. A. Whyte, B.A., B.J.
Administrative Assistant and Office Manager	G. Mitchell, B.A.
Nurse	Mrs. K. O. May, B.A., B.S., R.N.

The College of Education
Teaching Staff 1971–72

Administration and Program Development

Professor A. S. Nease, M.A., F.C.C.T.
Professor J. W. Greig, B.A., ED.D.
ate Professor V. K. Gilbert, B.SC., M.ED.
Lecturer R. A. Martin, B.A.SC., M.ED.
Lecturer J. D. Wood, M.A., A.R.C.T.

Art Education

sor Emeritus P. H. Taçon, B.A., B.PAED., M.A.
ant Professor M. J. McCarthy, M.A.

Business Education

Professor A. P. Seggie, B.A.
ate Professor J. H. Dool, B.A.
ate Professor G. A. Reid, B.COM., B.ED., M.A., F.C.C.T.
ate Professor R. B. Wilson, B.COM.
ant Professor B. E. Conchie, B.A.

Classics

Professor B. C. Taylor, M.A.
Lecturer K. E. Prentice, M.A.

Computer Studies

ate Professor L. J. La Fave, B.ED., M.B.A.
ate Professor C. C. Brodeur, M.A., PH.D.
ant Professor D. W. Garth, B.COM.
ant Professor G. D. Milbrandt, B.S.ED.

Counsellor Education

iate Professor C. L. Bedal, B.A., M.ED.
ant Professor B. R. Eardley, B.S., M.ED.
ant Professor P. A. Manuel, B.A., M.ED.

Economics and Political Science

ant Professor J. D. Thexton, M.A.

Educational Media

Professor	D. A. Clee, B.A., M.SC., F.R.G.S.
Lecturer	Miss E. Crampton, L.U.D., C.S.T.D., I.P.C.

Educational Psychology

Associate Professor	R. W. Dent, M.A., PH.D.
Associate Professor	C. C. Brodeur, M.A., PH.D.
Associate Professor	S. L. Kong, B.A., M.ED., PH.D.
Associate Professor	W. V. Trott, M.A.
Assistant Professor	Mrs. Conchita Tan-Willman, B.S.E., M.A., PH.D.
Assistant Professor	A. J. Zimmerman, B.A., M.ED.

Elementary Education

Professor	G. E. Tait, B.A., B.PAED., ED.D.
Assistant Professor	A. A. Bowers, B.A.

English

Professor	R. J. McMaster, B.A., B.ED.
Professor	J. H. Stevens, M.A.
Associate Professor	Mrs. Johan Aitken, M.A.
Associate Professor	A. C. Coman, M.A.
Associate Professor	J. W. MacDonald, M.A., ED.D.
Associate Professor	R. T. Shephard, B.A.
Assistant Professor	A. A. Bowers, B.A.
Assistant Professor	Miss Joan Laird, B.A.
Assistant Professor	K. J. Weber, B.A.

Geography

Associate Professor	W. E. Sager, C.D., B.A., F.A.G.S.
Associate Professor	R. P. Baine, M.A.
Associate Professor	A. Balins, M.A.
Associate Professor	Mrs. Una Elliott, B.A., M.A., B.ED.

History

Professor	J. C. Ricker, M.A.
Associate Professor	R. W. P. Bowles, M.A.
Associate Professor	J. E. Cruickshank, M.A.
Associate Professor	G. Smith, M.A.
Assistant Professor	L. R. Hill, M.A.
Assistant Professor	G. A. Whyte, B.A., B.J.

History, Philosophy, Sociology of Education

Professor Emeritus	A. F. Skinner, M.A., B.SC., PH.D., F.E.I.S.
Professor	J. M. Paton, M.A., D.PAED., F.C.C.T.
Associate Professor	G. W. Bancroft, B.A., M.ED., PH.D.
Associate Professor	D. A. MacIver, B.A., M.ED., DIP.ED., PH.D.
Assistant Professor	D. B. Brady, B.A., B.ED., M.A., M.ED.

nt Professor T. W. Goodenough, B.A., M.A.
nt Professor L. Stott, B.ED.
Lecturer R. A. McLeod, B.ED., B.A., M.ED.

Home Economics

te Professor Miss Helen Finnegan, B.A., M.S.
nt Professor Miss Audrey Warner, B.A., M.SC.
nt Professor Miss Annette Yeager, B.H.SC., M.ED.

Mathematics

Professor W. B. MacLean, B.A., M.A.
Professor K. O. May, A.B., M.A., PH.D.
Professor W. W. Sawyer, B.A., M.A.
te Professor D. L. Mumford, B.A.
nt Professor D. W. Alexander, B.A., B.ED.
nt Professor F. Ebos, B.SC., M.SC.
nt Professor D. L. Fraser, B.SC., B.ED.
nt Professor H. L. Ridge, B.SC.

Modern Languages

te Professor R. J. Jones, B.A., MUS.BAC., A.R.C.T.
te Professor G. A. Kirk, M.A., DIP.D'E.
te Professor R. R. A. Roy, B.A., B.PHIL., M.A.
te Professor C. R. Theodore, M.A.
nt Professor H. Hainsworth, M.A.
Lecturer E. F. James, M.A.
ial Lecturer
in Spanish A. M. Gordon, A.M., PH.D.
ial Lecturer
in Italian Mrs. M. Kuitunen, DOTT. IN LETT., M.A., PHIL.M.
ial Lecturer
in Russian
and German Mrs. G. J. Leech, DOC.PHIL.
ial Lecturer
in French Mme. M. Léon, L. ès L., D.E.S.
ial Lecturer
in French H. G. Schogt, M.A., PH.D.

Music

nt Professor Mrs. Natalie Kuzmich, MUS.BAC., M.A.

Physical and Health Education

Professor J. H. Passmore, B.A., B.P.H.E., B.ED.
te Professor J. R. Life, B.P.H.E., M.ED.
te Professor Miss Jean M. Stirling, B.A., DIP.P.H.E.
nt Professor Mrs. Janet Armstrong, M.A.
nt Professor Miss F. June M. Collard, B.P.H.E., B.A., M.SC.

Assistant Professor	D. F. Fawcett, B.P.H.E., M.A.
Assistant Professor	R. C. Goode, M.A., B.P.H.E., PH.D.

Psychology and Sociology

Professor	H. O. Barrett, C.D., B.A., D.PAED., F.O.T.F.

School Librarianship

Associate Professor	Miss Margaret Scott, B.A., B.L.S.
Assistant Professor	Miss Fay Blostein, B.A., B.L.S.
Assistant Professor	R. J. Smith, B.A., B.L.S.

Science

Associate Professor	R. G. Casson, B.SC.
Associate Professor	W. A. Andrews, M.SC., B.ED.
Associate Professor	H. M. Lang, B.A.
Assistant Professor	T. J. E. Wolfe, B.S.A.
Lecturer	J. F. Eix, B.SC.

Theatre Arts

Associate Professor	J. C. W. Saxton, M.A.
Assistant Professor	G. D. Wagner, B.A.

Technical and Industrial Arts

Professor	A. W. Frizzell, B.A.SC., P.ENG.
Professor	F. E. Mason, B.A.
Associate Professor	E. P. Emerson, B.A., M.ED.
Associate Professor	D. J. Long, B.A.
Associate Professor	T. H. G. Luther, B.A., B.ED., M.A.
Associate Professor	W. S. Sloan, B.A., A.O.C.A.
Associate Professor	C. H. Wall, B.A., B.ED., M.A.
Associate Professor	R. W. Wilson, B.SC., M.I.E.E.
Assistant Professor	R. G. Burfield, B.A.
Assistant Professor	A. Gaydos, B.A., M.ED.
Assistant Professor	I. T. Malloch, B.A., M.SC.
Assistant Professor	R. Sramek, B.A.
Assistant Professor	W. J. Watson, B.A.
Lecturer	P. J. Briggs
Lecturer	J. G. A. Jameson
Lecturer	C. Otto, B.A.
Lecturer	H. J. Taylor, B.A.
Director, Technical Proficiency Examinations	E. Gascoigne, P.ENG.

Staff of The University of Toronto Schools 1971-72

Headmaster	W. B. MacMurray, B.A., B.PAED.
Assistant Headmaster	C. D. S. Bate, B.A.SC., M.ED.
Art	D. F. Boutros, B.A.
Classics	E. J. Collins, B.A., B.PAED. H. C. Maynard, M.A. K. E. Prentice, M.A.
English	S. H. Bull, M.A. H. D. Gutteridge, M.A. W. R. H. Montgomery, M.A., PH.D. C. W. Weir, M.A. (on leave of absence)
Geography	J. L. McElroy, B.P.H.E.
Guidance	E. J. Collins, B.A., B.PAED.
History	D. A. Kearn, B.A., B.ED. R. J. Stewart, B.A.
Mathematics	G. A. Fleming, B.A., M.ED. N. D. Fox, B.COM. J. A. Vanstone, B.A.
ern Languages	P. F. L. Gallant, B.A. F. W. Ignatz, B.A. R. J. Moorfield, M.A. W. A. Stickland, B.A.
Music	G. F. FitzGerald
Physical and lth Education	J. L. McElroy, B.P.H.E. W. M. Simons, B.P.H.E., DIP.P.E. J. Stulac, B.P.H.E., B.A.
Science	C. E. B. LeGresley, B.A., M.ED. F. M. Speed, B.SC., B.SC.S., B.ED.
Librarian	(to be appointed)
tant Librarian	(to be appointed)

General Information

Location of College of Education

The College of Education is located at the corner of Bloor Street West and Spadina Avenue, in the northwest sector of the St. George Campus, University of Toronto. Mailing address of The College is 371 Bloor Street West, Toronto 181.

Function of College of Education

The basic function of The College of Education is the training of teachers for professional service in elementary and secondary schools, especially in the schools of Ontario. Programs of The College provide courses leading to *basic certificates* required for teaching in the high schools, collegiate institutes, vocational schools and elementary schools of Ontario. Other College courses lead to *additional certificates* in areas of subject specialization. The College itself does not grant teaching certificates. These are issued by the Ontario Department of Education on the recommendation of The Council of The College. With the exception of skilled tradesmen and some others taking Vocational courses, students in The College of Education are required to hold acceptable university degrees.

e Facilities

The College of Education is equipped with classrooms, lecture rooms, library, laboratories and gymnasia, an Educational Media Centre with a television studio and mobile television unit, language laboratories, a theatre studio, a computer centre and a typing laboratory.

he College Library

Students will find in the Library a major collection of books and periodicals on all aspects of secondary and elementary education, as well as small working collections on the various subjects taught in Ontario schools. In addition to its loan facilities, the Library provides a reference service to assist students in locating material on educational psychology, school administration and innovations in teaching methods.

The Library's selected collection of mounted pictures, filmstrips, pamphlets, slides, recordings and document kits is available to the students for use both in demonstration lessons at The College and in their practice teaching assignments at outside schools. Facilities for previewing audiovisual aids are provided in the Library.

Students at The College are entitled to use the main Universit Toronto Library, where they can obtain extensive materia subjects other than education.

5. University Facilities

Students registered for courses in The College of Education use the University's athletic facilities, and Hart House, under conditions as obtain with other students. They will also be adm to the Royal Ontario Museum, 100 Queen's Park, and to Toronto Art Gallery, Dundas Street, from 9 a.m. to 5 p.m. presentation of their Admit to Lecture cards.

6. Health Centre

The Health Centre, in charge of a registered nurse, offers to stu first aid, counsel with health problems, and referrals to do dentist, or hospital as appropriate. The Centre is open each during the session, Monday through Friday, from 8.30 a.m 4 p.m., Room 115, The College of Education.

7. The University Health Service

Any student may consult a staff physician at the Health Se 9 a.m. to 5 p.m., Monday to Friday, and 9 a.m. to 12 Saturday, while the University is in session. The University doe accept any responsibility for injuries sustained by students engaged in Physical Education classes or in University athletic a ties, but through the Health Service provides for treatment w the following limits: minor injuries are treated at its offices; t ment for more serious injuries will be provided if such treatme given under the direction and care of staff retained by the H Service. Treatment is limited to students who suffer accidents engaged in and which arise out of University Physical Educ classes and athletic activities.

Health Service (Men), 256 Huron Street, 928-2459
Health Service (Women), 256 Huron Street, 928-2456

8. Housing Service

The University of Toronto maintains a listing of rooming ho flats, apartments and homes. Information on these may be obt through the Housing Service office at 49 St. George Street, To 181.

Off-campus housing of this nature is not subject to Unive regulation, but every effort is taken to make the informatio complete as possible. Students are encouraged to assist in this e by reporting on the quality of the accommodation they occupied.

A limited amount of accommodation is offered in exchang part-time services such as housekeeping or babysitting.

9. St. Andrew's-University Day Nursery

This day nursery, established and supported by the Universit Toronto, the Graduate Students' Union and the Students' Ad istrative Council, provides pre-school education and day

facilities for children of University of Toronto students. Children aged two to five years are accepted.

The nursery, located at St. Andrew's United Church, 117 Bloor Street East, is well equipped and staffed, and is licensed under the Day Nursery Act, Province of Ontario. It operates from 8.30 a.m. to 5.30 p.m. throughout the winter and summer academic sessions. Fees are reasonable, and noon meals and morning and afternoon snacks are provided. Information may be obtained from the nursery (telephone 921-7078) or from the School of Graduate Studies.

University of Toronto Schools

The University of Toronto Schools, established in 1910 as a division of The College of Education, is a day school for boys from Grades 7 to 13. The normal enrolment is 420 students selected by competitive examinations from among a large number of applicants. Each year classes are admitted to Grades 7 and 9 respectively to replace the class graduating from Grade 13. The Ontario curriculum leading to university entrance is provided, with opportunities for enrichment, acceleration, independent study, and experimentation. The annual tuition fee is $300.00. The resources of the school are available to staff and students of The College for teaching practice, demonstration, and experiment.

. Tuition and Other Fees

Fees for the High School Assistants' Program and Technical and Industrial Arts Programs of the One-Year Session:

Academic Fee	Men $480	Women $480
Incidental Fees	Men $ 59	Women $ 34
Total Fees (if paid in one instalment)	Men $539	Women $514
First Term Instalment, due September 15	Men $299	Women $274
Second Term Instalment, due January 20	Men $243	Women $243

NOTES:

1 An applicant who is admitted to The College of Education will be required to pay at least the First Term instalment of fees by September 15, 1971, and before applying to The College Registrar for his card of admission to lectures.

2 The Academic Fee (which includes the examination and University Library fees) and the Incidental Fees are to be paid to the *University of Toronto* according to instructions on the *Fees Form* obtained from the Registrar.

3 The fee for students attending the Session after Christmas is $240 plus Incidental Fees.

4 Incidental Fees include the following:

For Men – Hart House, Students' Administrative Council, Athletic, and Health Service.

For Women – Students' Administrative Council, Athletic, and Hea
Service.

5 An additional charge of $3 is made for payment of fees in t
instalments.

6 After January 20, an additional deferred payment fee of $3
month (not exceeding $10) shall be imposed until the whole amo
has been paid.

7 There is no additional fee for the High School Assistants' P
gram, Type A, or for courses leading to additional certificates wh
taken concurrently with the High School Assistants' Progra
Type B.

8 Admission acceptances must be confirmed, in writing, to
Registrar of The College of Education within fourteen days of
date of acceptance by The College, accompanied by a $50 n
refundable deposit payable to the *University of Toronto* by certi
cheque or money order. The deposit will be applied to the applica
fee.

9 A special fee of $25, payable to the *University of Toronto*, is
quired of all students who register for Outdoor Education 45515
cover the cost of field trips and an Outdoor Education weeke
Cheques will be collected the first day of the course.

For Supplemental Examinations:

Fee for each supplemental examination in one subject of any course, except High School Assistants', Type A	$
Fee for the supplemental examination(s) for any High School Assistant's Type A Certificate	$

For Summer Sessions:

Summer Session for Teachers with Professional Education	$
Type A Seminars, Summer Session	$
Special Student, one subject	$

Business Education Summer Sessions:

Intermediate, Parts I and II, each	$
Specialist	$
Commercial-Vocational, each	$
Commercial Examinations, per subject	$
Updating Course	$

Counsellor Education Summer Sessions:

Parts I, II, III, and IV, each	$

Intermediate Home Economics Summer Sessions:

Intermediate, Parts II and III, each	$
Intermediate, Part IV	$

Industrial Arts Summer Sessions:	
Elementary, Parts I and II, each	$140
Elementary, Part III	$100
Intermediate, Parts I and III, each	$100
Specialist, Parts I, II and III, each	$100
Vocational and Occupational Summer Sessions:	
Type B for holders of H.S.A., Type B, Certificates	$140
Type B, Parts I and II, each	$140
Type A, Parts I and II, each	$100
Occupational Trades, Two-week Sessions, each	$ 40
School Librarianship Summer Session:	
Specialist	$120
Physical and Health Education Summer Sessions:	
For Secondary School Teachers	
Intermediate Parts I and II (Men and Women), each	$120
Specialist (Men and Women), each	$120
An extra fee will be charged for an Outdoor Education Course, taken in conjunction with a Physical and Health Education Course.	
For Elementary School Teachers	
Elementary, Intermediate Parts I and II, and Supervisor's, each	$100

NOTES:

The Incidental Fees required of students in the One-Year Program shall not be required of students in the Summer Session.

A candidate who applies after the last date for application to any course listed in this Calendar will be assessed a late fee of $20 if the candidate is admitted to the course.

A candidate who withdraws before the end of his course will be charged fees in proportion to the period of his attendance, i.e. up to the date of notice of his withdrawal.

nguage and Medical Regulations

Facility in English. For a candidate whose first language is other than English a requirement for admission will be the passing of a Communication Test for Teaching in the English Language. The test will be conducted by a Committee composed of representatives of the Ontario Secondary School Teachers' Federation, the Department of English of the University of Toronto, and The Council of The College. Arrangements for the test will be made by the Registrar's Office, The College of Education.

The College is prepared to consider other evidence that may be submitted to the Registrar for evaluation.

Physical Unfitness of Candidates. On the Dean's report to Minister of Education as to the physical unfitness of a student training as a teacher, the Minister may require a special med examination of such student, and, as a result thereof, may di that he be not eligible for recommendation for a departme certificate.

13. Student Affairs

The Student Union of The College of Education

The members of the student body of The College of Education drawn from most of the colleges and universities located ac Canada. In addition, many students come from American European universities.

The Union's functions embrace many facets of life about College – musical, dramatic, journalistic, social, athletic, and ex curricular. Of prime importance is the fact that members of Union are represented on The Council of The College and Committees.

14. One-Year Programs Offered in 1971–72

The College will offer the following One-Year Programs leading Department of Education Certificates, as well as to the Bachelo Education Degree:

Interim High School Assistants', Type B (See Sections 23–29)
Interim High School Assistants', Type A (See Sections 31–34)
Art Education (See Sections 36–38)
Business Education (See Sections 33–38)
Computer Studies (See Sections 33–38)
Counsellor Education (See Sections 36–38)
Elementary Education (See Sections 36–38)
Home Economics (See Sections 36–38)
Industrial Arts (for High School Assistants) (See Sections 36–38)
Industrial Arts (Intermediate and Specialist) (See Sections 89–92)
Music (See Sections 36–38)
Occupational, Type B (Practical Subjects) (See Sections 73–75)
Occupational, Type A (Practical Subjects) (See Sections 73, 75,
Physical and Health Education (See Sections 36–38)
School Librarianship (See Sections 36–38)
Theatre Arts (See Sections 36–38)
Vocational, Type B (See Sections 73–77)
Vocational, Type A (See Sections 73–74, 79)
Vocational Home Economics (See Section 78)

NOTE:

Details of courses included in the High School Assistants' Progra and Programs for Additional Certificates are found in Secti 44–71. Details of courses included in Technical and Industrial A Programs are found in Sections 82–88, 94.

Summary of ndary School Certificates

Listed below are the teaching certificates required for various purposes in the secondary schools of Ontario.

Certificate	*Subjects Taught by Certificate Holders*
Interim High School Assistant's Certificate, Type B	Academic and General Subjects
Interim High School Assistant's Certificate, Type A	Academic and General Subjects
Interim Vocational Certificate, Type B	The Vocational Subject named on the Certificate
Interim Vocational Certificate, Type A	The Vocational Subject named on the Certificate
Interim Occupational Certificate, Type B (Practical Subjects)	Occupational (Practical Subjects)
Interim Occupational Certificate, Type A (Practical Subjects)	Occupational (Practical Subjects)
Interim Intermediate Industrial Arts Certificate	Industrial Arts Subjects
Interim Specialist Industrial Arts Certificate	Industrial Arts Subjects
Interim Intermediate Certificate in Accountancy, Data Processing, Marketing, or Secretarial	Business Education Subjects
Interim Specialist Certificate in Accountancy, Data Processing, Marketing, or Secretarial	Business Education Subjects
Interim Commercial-Vocational Certificate, Type B (Commercial Subjects named)	Business Education Subjects

NOTE:

1 For *additional certificates*, see Sections 36–38.

2 For *Elementary School Teacher's Certificate*, see Section 40.

nterchange of tario Teaching Certificates, ementary and Secondary

1 The holder of a Permanent Elementary School Teacher's Certificate, Standard 4, may, upon accepting a contract from a board to teach in a secondary school, be granted an Interim High School Assistant's Certificate, Type B.

2 The holder of a Permanent High School Assistant's Certificate may, upon accepting a contract from a board to teach in an

elementary school, be granted an Interim Elementary Sc
Teacher's Certificate, Standard 4.

3 The holder of a Permanent High School Assistant's Certifi
who meets the Department of Education requirements for V
tional Certification, may, upon accepting a contract from a b
to teach a Vocational Technical course of a secondary schoo
recommended for an Interim Vocational Certificate, Type B, u
successful completion of one seven-week summer session,
after having obtained standing in the Technical Proficiency
amination. Acceptable assignments in Subject Analysis, Co
of Study, Shop Plan and Equipment List must also be submitte

4 The holder of a Permanent Vocational Certificate, a Perma
Occupational Certificate (Practical Subjects) or a Permanent C
mercial-Vocational Certificate, who has a university degree acc
able for admission to the Type B course at a College of Educat
may, upon accepting a contract from a board to teach the acade
classes of a secondary school, be granted an Interim High Sc
Assistant's Certificate, Type B.

5 It is expected that most transfers referred to in (1) and (2) ab
will take place in the case of teachers teaching in the general ra
of Grades 7 to 10. Persons transferring to teach in grades bey
this range are advised to take summer courses which will
them to adjust to the new duties.

18. Endorsement of the High School Assistant's Certificate, Type B

The holder of a High School Assistant's Certificate, Type B, m
have his certificate *endorsed* under the following conditions:

A candidate who has obtained second class standing or bette
an approved university course to a total of 15 credits in
secondary school academic subject, or 24 credits (12 credit
each) in two related academic subjects, and who completes a
of successful teaching subsequent to the date of his Type B Ce
cate in such subject(s) is eligible for endorsement of his Typ
Certificate.

The candidate must apply to the *Committee on Advanced Stand*
The College of Education, University of Toronto, for approva
his credits and subsequently to the appropriate Area or Munic
Director or Superintendent concerned, for endorsement.

19. Committee on Advanced Standing

The Committee on Advanced Standing gives rulings on acade
standing to candidates who are seeking endorsement of the H
School Assistant's Certificate, Type B, or who are applying
admission to a course leading to a High School Assistant's Ce
cate, Type A.

Written enquiries should be addressed to the Director, Commi
on Advanced Standing, The College of Education, 371 Bloor St
West, Toronto 181.

20. Letter of Standing, dary School

A Letter of Standing entitling the holder to teach in an Ontario secondary school for one year will be granted by the Minister of Education to a university graduate from any country who can meet the following conditions:

1 that his university transcripts indicate that the holder has met the academic requirements applicable to Ontario graduates;

2 that his professional training fulfils the requirements of the Ontario Department of Education;

3 that a candidate from outside Canada may be required to meet the Special Committee in the Department of Education;

4 that he is either a Canadian citizen or has Landed Immigrant status, or has applied for Canadian citizenship.

An application for a Letter of Standing must be forwarded to: The Registrar, Ontario Department of Education, 1 St. Clair Avenue West, Toronto 195.

On the statement of the Principal that the candidate has taught successfully for one year under the authority of a Letter of Standing, he may be recommended by the Area or Municipal Director or Superintendent concerned for the Interim High School Assistant's Certificate, Type B.

Bachelor of ion Degree: n Programs

The program leading to the Bachelor of Education Degree for graduates of The College of Education who were awarded the High School Assistant's Certificate prior to May, 1970, is described in Section 72A, page 71; the program for holders of Ontario permanent basic teaching certificates is described in Section 72B, page 71.

upplemental xaminations, Appeals, and ic Rights of Students

Supplemental Examinations and Appeals

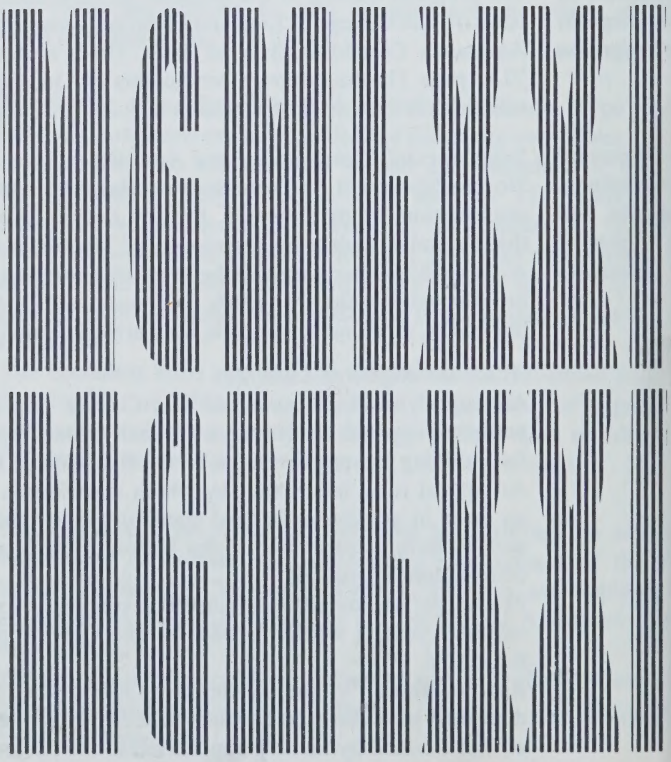
No candidate will be permitted to take more than twice any final examination, or part thereof, for any degree or certificate listed in this Calendar, except by permission of The Council of The College. A fee of $5.00 per paper in the form of a certified cheque or money order payable to the *University of Toronto* will be charged for checking marks, a refund to be made if an error is found.

Academic Rights of Students

An appeal to The Council of The College of Education shall be permitted against failure or a Council ruling regarding procedure for fulfilling the requirements of the Bachelor of Education degree. An appeal is an instrument by which a student is protected against an error in grading or in final standing, or by which a student may seek to have a regulation of the University waived on academic or compassionate grounds.

Procedure: A student is required to submit, before the end of the calendar year, a written appeal to The Council of The College of Education.

Reconsideration by the Senate of the University of Toronto: A student shall have the right to require the Senate to consider the decision of The Council by making application to the Secretary of the Senate.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One-Year Program leading to the Bachelor of Education Degree and to the Interim High School Assistant's Certificate, Type B

Bachelor of ation Degree

a The Degree of Bachelor of Education will be awarded by the University of Toronto to students on successful completion of the One-Year Program which leads also to the Interim High School Assistant's Certificate, Type B, awarded by the Ontario Department of Education.
b Commencing May 1971, a graduate of the One-Year program leading to the Interim Vocational Certificate, Type B, or the Interim Occupational Certificate, Type B (Practical Subjects), who holds an approved degree from a recognized university, who has the required number of years of wage-earning experience and who meets the other admission requirements peculiar to his subject, will be recommended also for the Bachelor of Education Degree. (See also page 74.)

. The Type B Certificate

The Ontario High School Assistant's Certificate, Type B, is awarded by the Ontario Department of Education, and qualifies the holder to teach academic and general subjects in the secondary schools of Ontario. The Interim Certificate may become a Permanent High School Assistant's Certificate upon completion of two years' successful teaching experience in a secondary school in Ontario.

. Admission equirements

The basic requirement for admission to the program leading to the Bachelor of Education Degree, and to the Interim High School Assistant's Certificate, is an approved university degree from an accredited university.
The candidate's university degree program must include at least 45 credits in Arts, Science or Commerce subsequent to Grade 13 (or equivalent).
The definition of a credit is derived from the basic assumption that there are approximately 60 credits in a four-year course. From this it follows that 15 credits is equivalent to a university year; and a credit may be defined as one-fifteenth of a university year.
In general, then, one university course equals three credits.
An applicant for admission to the Program for a High School Assistant's Certificate, Type B, shall make application to the Registrar, The College of Education, on an official form to be obtained

from the Registrar. The closing date for receipt of applicatio
April 1, 1971.
With the completed application form, the following must be
mittted:
1 *A certificate of birth.* If not born in Canada, the candidate
submit a certificate from a competent authority that he is a C
dian citizen, or has Landed Immigrant status, or has applie
Canadian citizenship. An applicant must be at least 20 years o
before October 1 of the year in which he applies for admissio
married woman applying for admission must submit a photo
of her marriage certificate to substantiate change of name.
2 *An official transcript in duplicate* showing proof of graduati
a Bachelor of Arts, Bachelor of Science, Bachelor of Comm
Bachelor of Applied Science, Bachelor of Household Sci
Bachelor of Music, or Bachelor of Physical and Health Educa
or other acceptable degree from a university, after a univ
course approved as to admission requirements and as to conte
the undergraduate courses.
A candidate for admission to The College of Education is req
to submit evidence of a negative tuberculin test reading or
x-ray taken within the year preceding September 20, 1971.
Admission acceptances must be confirmed, in writing, to the R
trar of The College of Education within fourteen days of the da
acceptance by The College, accompanied by a $50 non-refun
deposit payable to the *University of Toronto* by certified cheq
money order. The deposit will be applied to the applicant's fe
Limitation on Enrolment. In the 1971–72 One-Year program le
to the Bachelor of Education Degree, enrolment will be limit
1300 students. Among applicants who have fulfilled the admi
requirements, preference will be given to applicants with sup
academic qualifications in teaching subjects for which there
shortage of qualified teachers in Ontario secondary schools.
It may be necessary to limit enrolment in some options owi
limitations of staff and facilities.

26. Admission of Foreign Students

In a typical year, students from a dozen or more overseas cou
will be registered in The College of Education. A special eff
made to welcome qualified overseas students who plan to retu
their own countries on completion of their studies, and to
their special needs insofar as the resources of The College perm
Foreign students and others *who are candidates for the Bac
of Education degree but not for a teaching certificate of the On
Department of Education* must comply with such conditio
admission as The Council of The College may determine. O
the requirements may be a Communication Test for Teachi
the English Language (See Section 12).

Pre-College tion Period

All those who intend to become students in the One-Year Program of The College of Education are strongly advised to apply to the principal of a convenient secondary school for permission to spend a period in the observation of school organization, daily routine and teaching activities at the secondary school level. This period of several days' duration prior to the opening of The College term can be of genuine value to prospective teachers in acquainting them with problems of administration, instruction and student orientation at the beginning of the school year. For the 1971–72 Year the only dates available will be September 7, 8, 9, and 10.

Program of , One-Year on, leading Bachelor of ion Degree

Program of Studies, One-Year Session, leading to the Bachelor of Education Degree

Successful candidates with Canadian citizenship or Landed Immigrant status will be recommended to the Ontario Department of Education for the Interim High School Assistant's Certificate, Type B.

The program consists of four parts:
Part I Teaching Subjects
Part II Educational Theory
Part III Professional Practice
Part IV Additional Related Courses

Part I g Subjects

Teaching Subjects

1 A candidate will be required to select at least two teaching subjects.

2 On petition to The Council of The College, a candidate may be permitted to select three teaching subjects, the third in lieu of an Additional Related Course.

3 Normally, he will be required to elect *one* from list **a** and *one* from list **b**.

4 Any student may opt for *two* subjects from list **a**.

5 On petition to The Council of The College applicants with acceptable qualifications in two subjects from list **b** may be permitted to select these as their two teaching subjects. Evaluation of the candidate's credentials will be undertaken by the departments concerned, which will make their respective recommendations.

6 A student with academic qualifications for admission to courses leading to a Type A certificate or a Specialist certificate in a single teaching subject will be permitted to select his second teaching subject either from list **a** or **b**, with the concurrence of the departments concerned.

a Normally a candidate will be required to elect at least one of the following, for which the prerequisite is at least 2 university courses (6 credits):

English 417
French 4361
Geography 418
History 424
Latin 432
Mathematics 434
Science 450

b As his second subject, the candidate may elect another sul from **a** or one of the following for which there is no prerequ unless so indicated:

Art Education* 402 (6 university credits or background requi
Business Education* 410
Computer Studies* 460 (acceptance into one of the follo departments: Business Education, Mathematics or Science)
Counsellor Education* 422 (15 university credits required in chology, Sociology, Economics or related fields, at least which must be in Psychology)
Economics 412 (9 university credits required)
Elementary School* 416
Geology 420 (9 university credits required)
German 43601 (6 university credits required)
Greek 4321 (6 university credits required)
Home Economics* 428 (15 approved university credits require
Industrial Arts* 430
Italian 43602 (6 university credits required)
Music* 440 (6 university credits or background required)
Physical and Health Education* (Women) 442
Physical and Health Education* (Men) 4421
Political Science 444 (9 university credits required)
Psychology and Sociology 446 (9 university credits required)
Russian 43603 (6 university credits required)
School Librarianship* 448
Spanish 43604 (6 university credits required)
Theatre Arts 4522* or 4521

*Courses in these subjects lead to an additional Departmental tificate (See Section 36).

NOTES:

Type A Candidates
In selecting his subjects from **a** and **b**, a candidate for the Int High School Assistant's Certificate, Type A, must include the ject or subjects of the Type A Certificate.

Business Education
A candidate may take two teaching subjects in Business Educa (See Section 47); and, on petition granted by The Council of College, one subject listed above.

Counsellor Education
Enrolment in the Counsellor Education Course may have to be limited depending upon student demand, availability of staff and adequacy of accommodation. Those candidates who receive credit for this course, may, after one year of successful teaching experience in Ontario, be admitted to Part II of the Counsellor Education Summer Course.

Modern Languages
A candidate should not choose a modern language unless he has oral proficiency in the language and a thorough knowledge of its grammar. He will be required to undergo a language achievement test suited to this level. He should be fully aware that the major portion of the lecturing is done in the language concerned, and that he is expected to use the language in his teaching practice.
German, Greek, Italian, Russian, and Spanish may be elected only by a candidate for the High School Assistant's Certificate, Type A, in these subjects, except by permission of The Council of The College.

Physical and Health Education
Part II of the Intermediate Course in Physical and Health Education or the Specialist Course in Physical and Health Education may be taken as a third option under conditions outlined in Section 38.

School Librarianship
Because of the nature of the course, class size is limited.

Theatre Arts
Applicants should note that only one of the courses (4522) leads to the Theatre Arts Certificate.
Because of the nature of Theatre Arts, class size is limited.

Changes in Optional Subjects
The time limit for changing optional subjects will be two weeks from the date of registration, and thereafter only by the approval of The Council of The College.

Part II *Educational Theory*
onal Theory
a All candidates will take the course Structural and Legal Bases of the Ontario School System 4001

b In addition, a candidate must elect three courses from those offered by at least two of the departments as listed below:

Administration and Program Development 400
Program Development 4002
Program Development 40021
The Individual Student and the School Program 4003
Administration in the Modern School 4004
Evaluation: Measuring Student Performance 4005
Individual Research Project 4006

Educational Psychology 414
Psychology Applied to Education 4141
The Adolescent – At Home, in School and in the Community 414
Teaching – An Interpersonal Process I 4143
Teaching – An Interpersonal Process II 4144
Individual Research Project 4145

History, Philosophy, Sociology of Education 426
Comparative Education 4261
Dilemmas of Contemporary Education 4262
Modern Philosophy and Education 4263
Progressive Education in Theory and Practice 4264
School and Society 4265
Sociology of Education 4266
Values in Education 4267
Individual Research Project 4268
Authority and Freedom in School 4269
History of Canadian Education 42610

Technical and Industrial Arts (designed for Vocational Students)
Educational Psychology as Applied to Vocational Education 463
History and Philosophy of Vocational Education 467

c On petition, granted by The Council of The College, a stude may substitute a course from Part IV for one of the three cours from Part IIb.

Part III Professional Practice

Professional Practice
Candidates will be assigned to approved elementary and seconda schools for observation and practice teaching for ten weeks duri the session. There will be two assignments of four weeks and a fin assignment of two weeks. Practice Teaching is conducted under t tutelage of appointed associate teachers in cooperation with t teaching subject departments of The College.
Any candidate absent from scheduled practice teaching duties w be required to make up the assignment at the end of the term.

Part IV Additional Related Courses

Additional Related Courses
These courses offer a candidate the opportunity to concentra further on one of his teaching subjects by taking a related cours or to pursue an interest in another teaching subject or in the fie of general education.

A candidate must elect one course from (**a**) or (**b**) below:

a *Administration and Program Development*
Administration within the School System 45525
Research Methods in Education 45526
Teaching as a Profession 45519
The School's Institutional Setting 45520 (not offered in 1971–72)

Art Education
Art and the Humanities 45538
Design Education 45514

Computer Studies
Computers in Education 45505
Educational Tests and Measurements 45524

Educational Media
Educational Media 45506

Educational Psychology
Introduction to Child Psychology 45512
Principles of Programmed Learning 45516
Psychology of Communications 45517

Elementary School (Preference given to candidates in the Elementary school option)
Art and Crafts for Elementary Schools 45530
French at the Elementary School Level 45521
Music for Elementary Schools 45531
Physical and Health Education for Elementary Schools 45532

English
Developmental Reading 45527
The Language Arts of the Cinema 45522

Geography
Curriculum Theory and Design 45503 (not offered in 1971–72)
Game Theory and Simulation in Relation to Learning 45510 (not offered in 1971–72)
Special Education for the Disadvantaged Learner 45518 (not offered in 1971–72)

History, Philosophy, Sociology of Education
Educational Issues in Perspective 45528
History of Education 45511
Jean-Paul Sartre and Education 45535
Philosophy and Education in the Classical World 45534
Problems in Canadian Education 45536
Marxist Educational Theory 45533 (not offered in 1971–72)

Mathematics
Research Project in Mathematics Education 45523

Modern Languages
Applied Linguistics 45501
Culture and Society as it relates to the teaching of French 45529
Culture and Society in German Language Teaching 45502
Electronic Aids to Language Learning 45507
French at the Elementary School Level 45521

Music
Chamber Music 45537

Physical and Health Education
Current Health Problems in North American Society 45504
Outdoor Education 45515

Science
Environmental Studies in Science 45509
Science in the Elementary School 45540 (for Type A Sciences

Technical and Industrial Arts
English, Rhetoric and Semantics 45539
Introduction to Vocational, Occupational and Industrial Arts
cation 45513

b On petition, granted by The Council of The College:
1 a third teaching subject from Part I or a fourth course fron
II(**b**); or
2 a graduate or undergraduate course in another departme
the University which is relevant to one of his teaching subjects
vided that arrangements can be made with the department
cerned and there is no conflict with practice teaching. (A c
can be avoided by taking classes in the evenings or on Saturd
A candidate permitted to take such a course will be subject
regulations of the department for admission and credit.
Tuition fees will be paid by The College. Candidates for s
course should apply to the Registrar, The College of Educ
before August 1.

29. Conditions for Academic Standing

The standing of candidates will be determined by the com
results of term work and of the final examinations in the su
of Parts I, II, and IV, and by the record of Observation and Pr
Teaching in Part III.
Standing in the subjects of Parts I, II and IV will be issu
follows: A 80+, B 70–79, C 60–69, D 50–59, F below 50.
A student who obtains 50 per cent of the marks in each
courses in Parts I, II, and IV and 50 per cent in each of the su
taught in Part III may be recommended by The Council o
College for the Bachelor of Education Degree and for the In
High School Assistant's Certificate, Type B.
A student who passes in Part III and fails in not more than t
the courses included in Parts I, II, and IV, of which only one
be a teaching subject listed in Part I, may be exempted from fu
attendance, but will be required to take supplemental examin
in the courses failed.
A candidate who fails in a one-year program listed in The C
of Education Calendar may be re-admitted in a subsequent
with the approval of The Council of The College.
A candidate who withdraws from attendance in any program
in The College of Education Calendar may apply for re-adm
in a subsequent year on petition to The Council of The Colleg

plemental minations

Candidates for the High School Assistant's Certificate, Type B, who failed at an examination under former regulations and were exempted from subsequent attendance at The College of Education will take the final examination papers as prescribed herein, but their standing will be determined in the subjects as constituted under the regulations when they first wrote.

A candidate granted supplemental privileges may qualify for the certificate named below in one or more of the following ways, as authorized by The Council of The College of Education:

Type B

1 by taking an examination or examinations in August at the conclusion of a summer session;

2 by otherwise satisfying the requirements of the Department(s) concerned;

3 by attending the Summer Program for Teachers with Professional Education, taking only the subject(s) failed and writing the examination at the conclusion of the course.

In all instances, application must be made not later than June 25.

Type A

1 by taking an examination or examinations in August at the conclusion of a summer session (Application must be made not later than June 25);

2 by otherwise satisfying the requirements of the Department(s) concerned (Application must be made not later than June 25);

3 by successfully completing the Type A Summer Seminar (Application must be made not later than April 1).

Type A Practical Tests

Type A candidates exempted from attendance will take their supplemental practical tests at The College of Education. Application for teaching and practical tests must be made by December 31.

Second Failures

Should a student fail a second time in either or both of his supplemental examinations, he may be admitted to the Summer Session for Teachers with Professional Education choosing different optional courses if he has the required prerequisites, or he may be refused admission to further courses at the direction of The Council of The College.

One-Year Program for the High School Assistant's Certificate, Type A, and Specialist Certificate in Business and Commerce

e Type A ertificate

In general, candidates entering this program must hold an approved degree after a four-year university course following Ontario Grade 13 or equivalent and graduation with at least second class standing. At least 60 university credits are required.

The Interim High School Assistant's Certificate, Type A, qualifies the holder for five years as an assistant teacher of academic and general subjects in the secondary schools of Ontario.

The Interim Type A Certificate may become a Permanent High School Specialist's Certificate upon the completion of two years' successful teaching experience in Ontario on which the applicant has been graded as above average on subjects covered by the certificate.

The Permanent High School Specialist's Certificate qualifies the holder to become Head of a Department in a secondary school.

ditions of dmission

1 A candidate for a High School Assistant's Certificate, Type A, shall comply with the conditions of admission prescribed in the Department of Education Circular 649, which is periodically revised. Advice about these requirements as they apply to an individual candidate may be had upon enquiry to the Committee on Advanced Standing.

2 Applicants for admission to the Program for the High School Assistant's Certificate, Type A, shall be applicants for admission to the Program for the High School Assistant's Certificate, Type B.

3 No candidate will be awarded a High School Assistant's Certificate, Type A, *before* he has been awarded a High School Assistant's Certificate, Type B.

Specialist tificate in iness and ommerce

Business Education

There is no Type A program in Business Education subjects, but a program leading to the Specialist Certificate in Business and Commerce is provided.

Academic uirements

1 *Accountancy Specialist Certificate*

Admission to the program leading to the Accountancy Specialist Certificate will be granted to students who hold the degree of

Bachelor of Commerce from an Ontario university, or an equiv
degree from another province or country, with a standing
least 60% or III Class Standing, whichever is higher, and wh
otherwise qualified to enter the High School Assistants' Prog
Type B. The student will later be required to try a supplem
examination in any of the required subjects in which he
obtained less than 70% or II Class Standing, whichever is higher
required subjects are the university equivalents of: Bookkee
Accounting I, Accounting II, Business Law (or Business Fina
Business Machines, Economic Principles and one of Business A
metic, Office Practice, Business Organization and Management
Business Finance (or Business Law).

2 *Data Processing Specialist Certificate*
Admission to the program leading to the Data Processing Spec
Certificate in Business Education subjects will be granted to
dents who hold a Bachelor of Arts or equivalent degree w
standing of 60% or III Class Standing, whichever is higher, and
have taken university courses in the required subjects or wh
qualify by tests on these subjects. The required subjects are: I
ductory Accounting, Computer Concepts, Introduction to Pro
Solving, Business Data Systems, Advanced Problem Solving
Management Information Systems.

3 *Marketing Specialist Certificate*
Admission to the program leading to the Marketing Spec
Certificate in Business Education subjects will be granted to stu
who hold the degree of Bachelor of Business Administration
an Ontario university or an equivalent degree with a standin
at least 60% or III Class Standing, whichever is higher, and wh
otherwise qualified to enter the High School Assistants' Prog
Type B. The candidate will be required to try a supplement
any of the required subjects in which he has obtained less
70% or II Class Standing, whichever is higher. The required sub
are: Bookkeeping, Retail Merchandising, Business Organizatio
Management, Economics, Marketing Principles and one addit
Marketing course, and one of Business Machines, Business A
metic, Business Finance and Business Law.

4 *Secretarial Specialist Certificate*
Admission to the program leading to the Secretarial Spec
Certificate will be granted to students who hold the degre
Bachelor of Arts in Secretarial Science from an Ontario univ
or an equivalent degree with a standing of at least 60% or III
Standing, whichever is higher, and who are otherwise qualifi
enter the High School Assistants' Program, Type B. The studen
later be required to try a supplemental in any of the req
subjects in which he has obtained less than 70% or II Class Stan
whichever is higher. The required subjects are the university eq

Practice, Secretarial I and II and one of Office Procedures, Business Machines, Business Arithmetic and Business Organization and Management.

Recommendation of Type A Specialist Certificates

Subject to the condition that no student may be awarded a High School Assistant's Certificate, Type A, who does not already hold or is not also awarded a High School Assistant's Certificate, Type B, the final standing of candidates in attendance in the High School Assistants' Program, Type A, will be determined by the records of the practice teaching in the department or subject concerned, and by the combined results of the term work and the final examinations in the same department or subject. The pass mark is second class honours in the final examinations (including sessional records) and a rating of Good or better on the marks assigned to the practice teaching in the Type A field.

Supplemental Examinations

Information regarding supplemental examinations is found in Section 30.

Additional Certificates for Students in the High School Assistants' Program, Type B

A candidate in the High School Assistants' Program, Type B, n elect as an option one of a number of courses leading to additio teaching certificates.

36. Programs

1 Art Education (leading to Part I of the Intermediate Certific in Art)
2 Business Education (leading to Parts I and II of the Intermed Certificate in Accountancy, Data Processing, Marketing or Se tarial)
3 Computer Studies (leading to Parts I and II of the Intermed Certificate in Data Processing)
4 Counsellor Education (Part I of the program leading to Specialist Certificate in Guidance)
5 Elementary Education (leading to the Elementary Sch Teacher's Certificate, Standard 4)
6 Home Economics (leading to the Intermediate Certificate Home Economics)
7 Industrial Arts (leading to Part I of the Elementary Certificat Industrial Arts)
8 Music (leading to Part I of the Intermediate Certificate in Vo Music)
9 Music (leading to Part I of the Intermediate Certificate in Vo and in Instrumental Music)
10 Physical and Health Education (leading to Part I of the In mediate Certificate in Physical and Health Education)
11 Physical and Health Education (leading to Part II of the In mediate Certificate in Physical and Health Education)
12 Physical and Health Education (leading to the Specialist Cer cate in Physical and Health Education)
13 School Librarianship (leading to Part I of the Intermed Certificate in School Librarianship)
14 Theatre Arts 4522 (leading to the Theatre Arts Certificate)

37. Notes Regarding Courses for Additional Certificates

a *Art Education*

On the successful completion of Art Education 402, a candid may be recommended for Part I of the Intermediate Certificat Art.

b *Business Education*

Previous courses in business education or business experience is not required of a candidate who selects one or two options in Business Education. A candidate without sufficient background or skills may be required to attend an evening course in one or more of the subjects in Part I.

A candidate who selects only one option in Business Education leading to Part I of the Intermediate Accountancy, Data Processing, Marketing or Secretarial certificate must take one other option. He will be required to attend one additional summer course to qualify for the Intermediate Certificate in the Business Education field concerned. A candidate who selects Parts I and II in the One-Year Program may qualify for the Intermediate Certificate.

c *Computer Studies*

Admission to the course is dependent upon acceptance by one of the following Departments: Business Education, Mathematics or Science.

Computer Studies courses lead to Parts I and II of the Intermediate Certificate in Data Processing.

d *Counsellor Education*

Admission requirements are 15 university credits in Psychology, Sociology, Economics or related fields, at least 6 of which must be in Psychology.

Those candidates who receive credit for this option, may, after one year of successful teaching experience in Ontario, be admitted to Part II of the Counsellor Education Summer Course.

e *Elementary Education*

Other than the general requirements for admission to the High School Assistants' Program, Type B, there are no prerequisites for admission to Elementary Education. University courses in the arts, science, psychology, child study and sociology are considered most valuable for participation in the program.

f *Home Economics*

Admission to the course for the Intermediate Home Economics Certificate is restricted to candidates who submit evidence of graduation with a standing not lower than 60% or III Class Standing, whichever is higher, in the final year of a university program having at least five approved courses in Home Economics.

g *Industrial Arts*

Experience or education in Industrial Arts is not a prerequisite for admission to the Industrial Arts option. After successful completion of this option, a candidate may obtain the Elementary Industrial Arts

Certificate by successfully completing an additional seven-
summer program.

h *Music*

A candidate who selects Vocal Music as an optional subject c
High School Assistants' Program, Type B, may, with the app
of the instructor, choose Instrumental Music as a suppleme
course.

Admission to the Intermediate Instrumental Music course w
restricted to candidates for Part I of the Intermediate Vocal M
Certificate.

i *Physical and Health Education*

There are no prerequisites for admission to the Intermediate co
Part I.

Students who meet the admission requirements may become c
dates for Part II of the Intermediate Certificate in Physical
Health Education or for the Specialist Certificate in Physica
Health Education.

The admission requirement for the Intermediate course, Part
a minimum of six university credits in Physical and Health Educ

The admission requirement for the Specialist course is a mini
of 24 university credits in Physical and Health Education
related subjects (exclusive of methods courses).

Courses leading to Part II of the Intermediate Certificate a
the Specialist Certificate will be taken as a third option *in ad*
to the course leading to the Interim High School Assistant's C
cate, Type B, if a sufficient number of applications are receiv
warrant inclusion of these courses in the program. To be eligi
candidate must also select the Physical and Health Education o
leading to Part I of the Intermediate Certificate as one o
methods options.

After successful completion of Part II of the Intermediate
ficate, a candidate may proceed to the Specialist Certifica
summer sessions but not until the candidate has completed one
of successful teaching. *In addition to the above, as of July 1,*
five university courses in Physical and Health Education, bey
first university degree, will be required for admission to the Spe
Course in the summer session.

j *School Librarianship*

The course leading to Part II of the Intermediate School Libr
ship Certificate may not be taken in the summer immed
following completion of the One-Year Program.

k *Theatre Arts*

Because of the nature of Theatre Arts, enrolment is limite
applicants will be required to have a personal interview with a
ber of the Theatre Arts Department as part of the selection pr

commenda- Additional Certificates

1 *Art Education, Business Education, Computer Studies, Counsellor Education, Elementary School, Home Economics, Industrial Arts, Music, Physical and Health Education, School Librarianship, Theatre Arts*

On the recommendation of The Council of The College, one of the following additional certificates or credits may be granted to a candidate in the Program for a High School Assistant's Certificate, Type B, provided that the student is awarded the High School Assistant's Certificate, Type B: Part I of the Intermediate Certificate in Art, Business Education Subjects, Vocal Music, Instrumental Music, Physical and Health Education, School Librarianship; the Certificate in Theatre Arts; the Elementary School Certificate; the Intermediate Certificate in Home Economics; credit for Part I of the program leading to the Specialist Certificate in Guidance; credit for Part I of a two-part program leading to the Elementary Certificate in Industrial Arts.

2 *Physical and Health Education*

On recommendation of The Council of The College, Part II of the Intermediate Certificate in Physical and Health Education may be granted to a candidate who achieves the above stated standard for Part I of the Intermediate Certificate and who obtains 50% of the marks assigned to the written examinations and practical tests of the course leading to Part II of the Intermediate Certificate. The Specialist Certificate may be granted to a candidate who achieves the above stated standard for Part I of the Intermediate Certificate and who obtains a grade of B in the Observation and Practice Teaching in the course and a grade of B in the written examinations and practical tests of the course leading to a Specialist Certificate.

Ontario Teachers' Aquatic Standard – A candidate who is exempted by a medical certificate from a course in aquatics or a candidate who has failed to meet the aquatic standard may be awarded a certificate in Physical and Health Education endorsed 'without aquatics'. A candidate who meets the aquatic standard may be awarded a certificate endorsed 'Credit O.T.A.S.'.

ograms for didates not nended for artment of Education Certificate

A candidate for one of the following additional certificates who has met the other requirements of the Type B certificate but has failed to obtain pass standing in the remainder of the course may earn pass standing and be recommended for standing by following the conditions listed below:

1 In *Art, Vocal Music, Instrumental Music or School Librarianship*, a candidate who fails in not more than two subjects of the written and practical tests may complete his standing by passing in the subjects concerned at a subsequent examination without further attendance, but in the subjects of the practical tests such a candidate must try tests conducted at the Summer Session or by arrange-

ment approved by The Council of The College. Any other ca
who fails shall repeat the course for standing.

2 In *Business Education*, a candidate who fails in the wr
practical tests in not more than two subjects may comp
standing at a subsequent examination or by attendance at
quent Summer Session.

3 In *Counsellor Education*, a candidate who fails to obtain
may complete his standing, without further attendance, by
certain conditions which will be determined in each case
Council of The College.

4 In *Home Economics*, a candidate who fails in the wri
aminations but passes in all the subjects of the term wo
complete her standing by passing in the written examinat
subsequent date without further attendance. A candidate wh
in the written examinations but fails in one or more of the
of the term work may obtain her standing by completing
fully the Home Economics option of the High School A
Type B Summer Program for Teachers with Professional Ed
Any other candidate who fails shall repeat the course for s

5 In *Industrial Arts*, a candidate who fails in the written e
tions but passes in all the subjects of the practical tests m
plete his standing by passing in the written examination a
sequent date without further attendance. A candidate wh
in the written examinations but fails in one or more of the
of the practical tests may obtain his standing by complet
cessfully a subsequent summer course under conditions to b
mined by The Council of The College. Any other candid
fails shall repeat the course for standing.

6 In *Physical and Health Education*, if a candidate fails to
the passing standard, the course must be repeated either i
sequent Summer Session or in the regular One-Year Progra

7 In *Theatre Arts*, a candidate who fails to achieve a passi
ard will normally be required to fulfil the requirements by a
the six-week Summer Program for Teachers with Pro
Education. Any other candidate who fails shall repeat the co
standing.

Program in Elementary Education

Elementary I Teacher's Certificate

In order to qualify as a teacher in both elementary and secondary schools in Ontario, a candidate may elect as one option a program leading to the Interim Elementary School Teacher's Certificate.

nditions of Admission

1 Candidates shall comply with the conditions of admission and attendance prescribed for candidates of the High School Assistants' Program, Type B.

2 Applicants should note that no candidate will be awarded an Interim Elementary School Teacher's Certificate before he is awarded an Interim High School Assistant's Certificate, Type B.

3 Candidates should have a university background with breadth in the arts, science or languages together with courses in psychology, sociology or child study.

Program of Studies

Because the Program for the Elementary School Teacher's Certificate offers instruction in a group of courses, the total lecture time is *ten hours per week*, including the course in Additional Related Courses. This fact should be considered carefully when the candidate is selecting options in the High School Assistants' Program, Type B.

The Elementary School Program consists of the following courses and activities:

PART I

Compulsory Courses:

4161 English for Elementary Schools (2 hours)
4162 General Methods and Management (1 hour)
4163 Mathematics for Elementary Schools (2 hours)
4164 Science for Elementary Schools (1 hour)
4165 Social Studies for Elementary Schools (2 hours)
and at least one of the following Additional Related Courses:

45530 *Art and Crafts for Elementary Schools** (2 hours). An introduction to the creative use of media in two and three dimensions; basic design, point, line and shape; print-making; teaching methods; subject integration.

45521 *French at the Elementary School Level** (2 hours). Fre as a second language from the earliest grades of the elemen school; programs; procedures specific to the age level; audio-vi aids. Candidates able to satisfy the admission requirement of Department of Modern Languages may take this course in lie Art, Music or Physical Education.

45531 *Music for Elementary Schools** (2 hours). A study of temporary approaches to music learning in elementary schools. dent teachers in this course will be required to participate i variety of activities.

45532 *Physical and Health Education for Elementary Scho* (2 hours). A critical examination of teaching procedures wh relate specifically to the aims of Physical and Health Educat an activity course based on participation in and examinatio games, gymnastics and dance appropriate for the healthy deve ment of children ages 6 to 14.

*Enrolment preferences will be given to candidates registered in Elementary School Program.

PART II

Observation and Practice Teaching (five or six weeks) in sele elementary school classrooms of Metropolitan Toronto. Such w are included within the ten weeks of Observation and Prac Teaching required of all students in the Program for the F School Assistant's Certificate, Type B.

43. Supplemental Examinations

A candidate failing in one or more subjects of the Elemen School Program may write the supplemental examination(s) August.

MCMLXXI
MCMLXXII

Details of Courses in Programs leading to the Bachelor of Education Degree and to the Interim High School Assistant's Certificate and Additional Certificates

In each case, the numeral in brackets indicates the numb lecture hours per week.

44. Required Course

All students proceeding to the Bachelor of Education Degre to the High School Assistant's Certificate, Type B, will be req to take:

4001 *The Structural and Legal Bases of the Ontario School Sy* (1 hour). The organization of provincial and local systen education; powers and duties of the various educational autho the Education Acts and Regulations of the Province of On Course content will be covered primarily through directed rea Lectures will be given on related topics of current educa interest. The course is conducted by the staff of the *Departme Administration and Program Development.*

45. Administration and Program Development

400 *Administration and Program Development*
Courses offered in Part II Educational Theory

4002 *Program Development* (4 hours). An examination of th of the teacher as a designer of educational experiences withi school program. Emphasis will be given to the application o rent theory and practice of curriculum design to the develop of specific school programs which attempt to meet a varie individual and social needs. Participants will undertake indiv projects as well as participate as members of a curriculum tea the production of group materials.

40021 *Program Development* (2 hours). An examination o rent theory and practice in curriculum design and their relatio to teaching and school organization.

4003 *The Individual Student and the School Program* (2 ho School programs and practices which meet individual differ among students. A general study will be made of innovative t ing and organizational patterns, including particularly the graded school, credit organization, house plans, team tea independent study, and other related topics.

4004 *Administration in the Modern School* (2 hours). A practical study of the use and organization of school resources and services in providing an effective educational program. Emphasis will be placed on the rôle of the teacher in phases of school operation such as discipline, staff relationships, organization of classes, individualizing instruction, evaluation procedures, and the design and implementation of overall school programs.

4005 *Evaluation: Measuring Student Performance* (2 hours). A study of current evaluation practices in the schools. The course will develop some of the theoretical issues underlying evaluation methods, the design and marking of a wide variety of testing instruments, including essay, objective, oral, project, and self-assessment. The fair assessment of individuals, comprehensive systems for schools, distinctions between subjects, home reporting, concepts of promotion and failure, and grading systems will also be considered.

4006 *Individual Research Project* (2 hours). Students who wish to engage in an individual research topic must consult a member of the Department at the time of College registration.

Courses offered in Part IV, Additional Related Courses

45519 *Teaching as a Profession* (2 hours). A study of the development of teaching as a profession; the current status of the profession, and new orientations within the North American context; interprofessional relationships.

45520 *The School's Institutional Setting* (2 hours). (Not offered in 1971–72.)

45525 *Administration within the School System* (2 hours). A review of planning and administrative procedures in large systems of education. Particular emphasis will be given to the organization of learning resources, student services, and parent-teacher-student relationships. The interaction of trustees, senior officials, resource personnel, and school administrators will be considered. The effectiveness of large systems in formulating and in achieving desirable educational programs for the individual student and for society as a whole will provide a constant focus for study.

45526 *Research Methods in Education* (2 hours). This course will introduce students to methods of research used in Education. Emphasis will be directed to research in Educational Administration and Program Development. During the course students will develop a research project of their own.

t Education

402 *Art Education* (8 hours). There will be three major areas of study: History and Philosophy of methods of Art Education (2

hours); Instruction and Practice in two- and three-dimensional sign in various media, with methods of class presentation (4 hour History of Canadian Art and Architecture, with emphasis on use of local materials as the basis for a study of Art History secondary schools (2 hours).

502 *Seminar in Art Education* (4 hours). For Type A candidates Art. The development of curricula for senior classes; the use resource materials; experimental work in media; examination aesthetic theories; research in Art history; environmental design

Courses offered in Part IV, Additional Related Courses

45538 *Art and the Humanities* (2 hours). An examination of relationships between Art, Literature and Music in Western civili tion.

45514 *Design Education* (2 credit hours). A lecture-studio cou which examines problems presented to the artist by the mach production of industrial society. The impact of technological devel ments upon environment; the solutions which have been formulat Tentative explorations of problems presented by recent developme This course is offered in conjunction with the Technical and Ind trial Arts Department.

47. Business Education Courses for the Intermediate Certificate

1 Accountancy Program

a *one option*		**b** *two options*	
Intermediate Part I		*Intermediate Part I*	
Introductory Accounting	410113	plus *Intermediate Part II*	
Typewriting	410103	Business Teaching Applications of Accounting	410 410

2 Data Processing Program

a *one option*		**b** *two options*
Intermediate Part I		*Intermediate Part I*
Introductory Accounting	410113	plus *Intermediate Part II*
Typewriting	410103	Computer Studies Option (see Section 48)

3 Marketing Program

a *one option*		**b** *two options*	
Intermediate Part I		*Intermediate Part I*	
Introductory Accounting	410113	plus *Intermediate Part II*	
Introductory Marketing	410133	Business Teaching Related Marketing Concepts	410 410

4 Secretarial Program

a *one option*		**b** *two options*	
Intermediate Part I		*Intermediate Part I*	
Typewriting	410103	plus	
Introductory Stenography	410123	*Intermediate Part II*	
		Business Teaching	410153
		Office Procedures	410223

ses for the Specialist Certificate

1 *Accountancy Specialist*		**2** *Data Processing Specialist*	
Accounting	410413	Advanced Computer Studies (See Computer Studies Section 48)	410443
3 *Marketing Specialist*		**4** *Secretarial Specialist*	
Marketing	410433	Secretarial Science	410423

NOTE:
Preference will be given to those selecting Business Education as two options.

scription of Education Courses

410103 *Typewriting* (3 hours). The development of a basic facility in typewriting, the application of this facility and the problems of teaching the junior grades in the secondary school.

410113 *Introductory Accounting* (3 hours). To acquaint students with general accounting fundamentals including general bookkeeping practices and basic accounting concepts, and the teaching of this in the secondary school.

410123 *Introductory Stenography* (3 hours). A course in the theory and application of Pitman Shorthand including consideration of the theoretical aspects of high speed writing and the teaching methods, approaches, and practices currently in use in the schools. The course includes the investigation and practices of advanced teaching techniques.

410133 *Introductory Marketing* (3 hours). The total distribution process will be surveyed, but particular emphasis will be on the Canadian retail organization. The study will be consumer oriented. This course will include theory and a practical approach to teaching methodology.

410153 *Business Teaching* (1 hour). This will establish the fundamental philosophies pertaining to the instruction of Business Education subjects. It will direct specialized applications to the individual subject areas. The correlation of all business subjects will be studied.

410213 *Applications of Accounting* (3 hours). The development of

a basic facility in the use of business machines and a knowledge o the organization, law, financing and computerization of a busines

410223 *Office Procedures* (3 hours). A practical course in th teaching of stenographic techniques including the practices an procedures followed in the modern office.

410233 *Related Marketing Concepts* (3 hours). A survey of th peripheral aspects of marketing, both from a content and methodolo gical viewpoint. Included will be the functional aspects of busines and a study of distributive processes. The practical implications o marketing mathematics as related to business machine application will be examined.

410413 *Accounting* (1 hour). Accounting for partnerships, corpo rations, departments and manufacturing and the methods of pre senting these topics.

410423 *Secretarial Science* (1 hour). A course in advanced steno graphic and secretarial practices. The course includes the organiza tion and preparation of modern office practices and procedure including current and advanced teaching techniques and procedures.

410433 *Marketing* (1 hour). The principles of teaching marketin subjects as they apply to the upper grades of the Business Educatio course. The stress is on practical applications and their relevanc to the individual in our consumer-oriented society.

NOTE: For information regarding Business Education courses writ to the Director, Business Education Department, The College o Education.

48. Computer Studies

460 *Computer Studies*

Required:
46001 *Computer Concepts*
46002 *Introduction to Problem Solving*
46003 *Computer Studies Principles and Practices*

For Business Education candidates wishing to obtain a Data Pro cessing Specialist Certificate, the following additional courses ar required:
46014 *Business Data Systems*
46005 *Advanced Problem Solving*
46016 *Management Information Systems*

For Mathematics and Science candidates who have successfully completed university courses equivalent to 46001 and 46002, on of the following courses will be substituted in the option:
46005 *Advanced Problem Solving*
46027 *Computer Applications*

46001 *Computer Concepts* (Prerequisites: None) (3 hours, September–December).
Basic computer concepts, flowcharting techniques, computer terminology, equipment peripheral to the computer system and information flow through a computer system are studied. Emphasis is placed on problem solving techniques using the computer. Students are also introduced to a basic computer language.

46002 *Introduction to Problem Solving* (Prerequisites: Computer Concepts or Departmental Consent) (3 hours, January–April).
This course is applications oriented allowing the student to use the computer as a problem solving tool. Students are introduced to a high level programming language, as a vehicle of communication, and problem solving through flowcharting, coding, testing and debugging.

46003 *Computer Studies Principles and Practices* (Prerequisites: Computer Concepts or Departmental Consent) (3 hours).
Students are provided with an understanding of the teaching of computer courses in the secondary school. Emphasis is on the problematic approach to the teaching of computer concepts and computer programming. This course also explores the "hands-on" versus "theory" and the "hypothetical computer" versus "actual hardware" approach. Topics to be discussed: transfer of learning from one computer to another; optimum class size; available teaching aids; motivation techniques; evaluation; course objectives.

46005 *Advanced Problem Solving* (Prerequisites: Introduction to Problem Solving or Departmental Consent) (3 hours).
Opportunities are provided for the students to use the computer to solve more advanced problems related to their discipline. In addition to the basic documentation requirements, the students will be required to design the necessary input/output documents, and prepare and update suitable data files.

46014 *Business Data Systems* (Prerequisites: Introduction to Problem Solving or Departmental Consent, Business Education students only) (3 hours).
Organization of a business, management control and the flow of information through the business are examined. Emphasis will be placed on the flowcharting of some of the main business systems with suitable documentation, record layout and forms design. The use of unit record equipment in a computer environment will be examined. These concepts will be reinforced through the use of student projects.

46016 *Management Information Systems* (Prerequisites: Business Data Systems or Departmental Consent, Business Education students only) (3 hours).

Students are expected to apply systems knowledge to the solving
a case study. They will be required to design, flowchart, progra
and document a complete system. Students will also be required
implement aspects of their recommendations.

46027 *Computer Applications* (Prerequisites: Advanced Proble
Solving or Departmental Consent, Mathematics or Science studen
only) (3 hours).
Statistical techniques, matrix operations, approximations, etc. a
utilized in the solution of scientific/research problems on the co
puter.

Courses offered in Part IV, Additional Related Courses

45505 *Computers in Education* (2 hours). This course is designe
to study the use of the computer as an instructional and admini
trative aid in education. Areas to be discussed include: Compute
Assisted Instruction, Test Scoring, Item Analysis, Curriculu
Educational Research, Student Accounting and other studen
oriented areas. Emphasis is on the computer as a problem-solvi
tool. Prior computer courses or knowledge is not required. Acce
to the computer centre will be available to students for clas
assigned and other approved projects.

45524 *Educational Tests and Measurements* (2 hours). This cour
emphasizes the practical approach to tests and measurements. St
dents will be required to construct tests and use the computer
evaluate their results. Other areas of study include: techniques
measurement; test construction; application of testing; and concep
of educational measurement. Computer training or experience n
essential.

49. Counsellor Education

422 *Counsellor Education* (6 hours). Counselling theory and pra
tice; assembling educational and occupational information for st
dent use; individual assessment procedures; group methods a
processes; history and foundations of Guidance.

NOTE: For further information, write to the Counsellor Educati
Department, The College of Education, 371 Bloor St. We
Toronto 181.

50. Economics

412 *Economics* (4 hours). A series of lectures and seminars on t
following with specific reference to classroom practice:
A survey of Economics curricula as set out by the Department
Education; methods and materials useful in the teaching of E
nomics; aims in teaching Economics; the content of an Econom
course; principles of course construction; examination and eval
tion of a variety of approaches to the teaching of Economics;

student of Economics; motivation and evaluation; dealing with individual differences.
Preparation of a course of study in Economics.

512 *Economics* (4 hours). For Type A candidates in Economics and in Political Science and Economics. A series of lectures and seminars with emphasis on the practical application of the following:
The nature of Economics; aims and methods in the teaching of Economics; the content of an Economics course; principles of course construction; the examination of a number of approaches to the teaching of Economics, e.g., those of Lovenstein, Wiggins, Senesh, Darcy & Coleman; Economics within the History and Social Science Program; evaluation.
Preparation of a course of study in Economics.

Educational Media

Course offered in Part IV, Additional Related Courses

45506 *Educational Media* (2 hours). The course will include a study of the basic principles of communication; the use of the various media such as film projectors, tape recorders and television will be a major part of the course.

Educational Psychology

414 *Educational Psychology*

Courses offered in Part II, Educational Theory

4141 *Psychology Applied to Education* (2 hours). Open to all students. Designed to show relevance of general Psychology to teaching. Provides an overview of the areas of Psychology related to education and teaching; problems in human communication, rôle of feedback, non-verbal communication, mass media, T.V., radio. Modern theories of learning will be examined and compared; the relevance of learning theory to motivation, aptitudes and attitudes, learning discrimination and skills, the slow learner, development, maturation and special education, research in education, programmed learning and computer-assisted instruction.

4142 *The Adolescent – At Home, in School and in the Community* (2 hours). The adolescent period; adolescent needs and processes of adjustment; the adolescent and social class; adolescent-adult relationships; the adolescent and his peer group; physical development; intellectual development; development of interests, attitudes and values; heterosexual development of adolescents; adolescent disciplinary problems; adolescent delinquency.

4143 *Teaching – An Interpersonal Process I* (2 hours). The teacher as partner in an interpersonal learning process; increased awareness and insight about forces operating in groups; how one's own behaviour affects group productivity; application of theory to develop-

ment of innovative plans for better classroom teaching using large and small groups.

4144 *Teaching – An Interpersonal Process II* (4 hours). This course is planned for students who wish to pursue in greater depth the areas of study included in Course 4143. In addition, it will include enquiry into the principles of sensitivity training and the various types of encounter groups, and the way in which experience in small group living will increase the awareness of the forces affecting the teacher and the student in the school situation. Increased self-understanding and the ability to structure the social environment for the improvement of learning are among the goals of this course.

4145 *Individual Research Project* (2 hours). Students with good academic background in Psychology and some previous research experience may be permitted to do an individual research project on some topic related to Psychology and its application to education. Students seeking such permission must have the approval of a departmental committee which may recommend to The Council of The College that permission be granted to pursue this research project in lieu of one and in exceptional cases two courses in Educational Psychology.

Courses offered in Part IV, Additional Related Courses

45512 *Introduction to Child Psychology* (2 hours). Motivation; why children learn; physical characteristics and school behaviour; children's abilities; children as social creatures; personality adjustment.

45516 *Principles of Programmed Learning* (2 hours). Preparing and structuring objectives; programming styles; linear and branching; principles of writing and revising programs; feedback; computer-assisted instruction; program evaluation.

45517 *Psychology of Communications* (2 hours). This course deals with the field of communications as a Behavioural Science. It is concerned with such areas as persuasion and dissuasion; Information – storage, retrieval and generation; Loss of Message – interpersonally and in the formal and informal learning situations. Media – limitations of and possible uses of – in educational systems. Societies' and institutions' ability to generate meaningful information. One of the aims in this course is to assist the students to cope with increasing amounts of information available and to cope with increasing complexity rather than avoid it.

53. English 417 *English* (4 hours)

LITERATURE:

Values inherent in the study of good literature; basic approaches; various methods of presenting such literary forms as the poem, the

drama, the essay, the short story, and the novel; the choosing of suitable text-books for pupils of different abilities and grades; planning courses of study; setting and marking examination papers; oral and supplementary reading; problems related to the teaching of English literature.

COMPOSITION:

The basic aim in teaching composition; place and treatment of grammar, rhetoric, logic and word study in the teaching of composition; principles to be followed in arranging courses; studying models; assigning, planning, evaluating and correcting compositions; improving the pupil's oral English; conducting class discussions; problems related to the teaching of English composition.

MEDIA:

The basic aim in treating mass media; objectives; categories; procedures.

ELECTIVES:

Creative thinking; developmental reading; creative drama; screen education; group dynamics; creative writing; mass media; psycholinguistics.

517 *Seminar in English* (4 hours). For Type A candidates in English and, in part, English and Drama, English and French, English and German, English and History, English and Latin, English and Russian, English and Spanish.

Teaching and discussion of selected topics; the English specialist; the Head of the Department; new methods; sequential programming; thematic study; comparative techniques; enrichment; acceleration; the slow learner; educational television; the new grammar; works in translation; remedial and developmental reading; advanced and general courses; mass media; creative thought; creative writing; professional development; the ungraded school; the future of English studies.

Courses offered in Part IV, Additional Related Courses

45522 *The Language Arts of the Cinema* (2 hours). The course is designed to study trends in contemporary cinema. Although the course concentrates mainly on feature films of such directors as Hitchcock, Bergman, Varda, Antonioni, Fellini, Godard, Truffaut, Resnais, Losey and Lester, it does not neglect the popular cinema nor does it omit experimental short films. The several arts of the director, script writer, actor, editor, lighting-cameraman, composer, and sound man are studied so that the students may have a full appreciation of the language arts amalgam that we experience in the cinema. Enrolment is limited.

45527 *Developmental Reading* (2 hours). This course is designed

to introduce students to the possibilities of developmental readi at the secondary school level. Basic principles underlying a instructional program will be discussed. Specific methods of dete mining reading achievement, selecting patterns of organization, ar planning the instructional program will be introduced. Of maj emphasis will be the devising of practical developmental readi programs. Enrolment is limited.

54. Geography

418 *Geography* (5 hours). Listed below are a number of Geograph course units designed to give a degree of flexibility in the prepar tion of Geography teachers. This professional course has be designed to meet the demand for professionally trained people wh are either

i graduate Geographers (Type A candidates)

ii other University graduates (Type B candidates)

and who will proceed to a career in education, either as a speciali teacher of Geography, or as one who wishes to teach Geograph together with other subjects. Because the department uses a tea approach, two or more members of staff may be concerned wi each unit.

4181 *Geography – Orientation.* The scope of the rôle of the Ge graphy teacher.

4182 *Geography – Curriculum Planning.* Recognition of a cur culum framework as a general context within which the strate of obtaining educational objectives and classroom practice may discussed; examination of courses of study in order to identify a evaluate their components in relation to the principles of curriculu design.

4183 *Geography – Instructional Techniques and Procedures.* Re ognition, analysis and construction of learning situations in order understand how educational objectives in Geography are achieve study of various resource materials, teaching procedures and tec niques which facilitate the achievement of such objectives; inves gation and construction of objectives and the development of un of study as an organizing structure within which effective instru tion and learning take place. Practice Teaching includes a clini observation of the teaching-learning process; an expression of ph osophy, techniques and procedures in the classroom and in the fie

4184 *Geography – Educational Measurement and Evaluation.* study of ways to evaluate the effectiveness of learning experien

4185 *Geography – Field Studies.* Integration of the objectives a techniques of 'landscape' study.

4165 *Geography* (Social Studies) for students in the Element School option. A program based on the second, third and fifth Ge raphy courses outlined above.

518 *Seminar in Geography* (3 to 4 hours). For Type A candidates in Geography. Candidates will meet as a special class in a program concerned with the study of Principles of Curriculum Design as models for the development of geography curricula which meet the various future conditions and variables in education.

Courses offered in Part IV, Additional Related Courses

45503 *Curriculum Theory and Design: A Research Seminar* (2 hours). Not offered in 1971–72.

45510 *Game Theory and Simulation in Relation to Learning* (2 hours). Not offered in 1971–72.

45518 *Special Education for the Disadvantaged Learner* (2 hours). Not offered in 1971–72.

55. Geology

420 *Geology* (4 hours). Value and objectives of a Geology course in the Ontario secondary school curriculum: Four-Year Program; investigation and study of appropriate teaching methods; procedures and curriculum organization; use and value of maps, equipment, teaching aids, books and field exercises for secondary school Geology.

520 *Seminar in Geology* (3 hours). For Type A candidates in Geology. (These candidates are advised to select Geography or Science as the other option in the High School Assistants' Program, Type B.) Teaching and discussion of the Geology curriculum; development and analysis of some of the difficult topics by means of original research and subsequent reports; experimental treatment of the work; field exercises; use of texts, manuals, maps and teaching aids; measurement and evaluation; organization and timing of a course of study in Geology and Mineralogy; discussion of appropriate teaching methods and procedures.

518/20 *Seminar in Geography and Geology* (3 hours). For Type A candidates in Geography and Geology.
Contents and methodology of the prescribed courses in Grades 11, 12 and 13. Additional details of the seminar are included in prescriptions for Geography and Geology above.

56. History

424 *History* (4 hours). A series of lectures and seminars on the following with specific reference to classroom practice:
Survey of history curricula in the schools; principles of course organization; procedures in course organization; factors in the development of effective teaching.
The teacher's philosophy and objectives in teaching history.
A study of the various forms of methodology used in history classes; evaluation of resources; new approaches to history teaching.
The student of history; motivation; evaluation; dealing with individual differences.
Preparation of a unit of a course of study in history.

524 *History* (4 hours). For Type A candidates in History and English and History. A series of lectures and seminars with emphasis on the practical application of the following:
A study of the critical philosophy of history, emphasizing the methods of the historian and the problems of historical knowledge; a brief survey of the approaches of selected historians and philosophers to these problems.
Cognitive and affective objectives in teaching history; approaches to the teaching of history such as thematic chronological, problem inquiry, public issues, concepts and generalizations.
Various forms of methodology.
The planning and organizing of historical material for presentation by various methods including the treatment of themes, trends and interpretation of material.
Analysis of student difficulties.
Evaluating the effectiveness of teaching and learning.
Preparation of a Teaching Program of a major unit of a course of study.

57. History, Philosophy, Sociology of Education

426 *History, Philosophy, Sociology of Education*

Courses offered in Part II, Educational Theory

4261 *Comparative Education* (2 hours). Much of the content of this course can be determined by the interests of students enrolling for it. In general terms it may be concerned with methods in comparative education, with certain distinctive features in the educational systems of Canada and other leading countries in the western world, and with trends towards international cooperation in education.

4262 *Dilemmas in Contemporary Education* (4 hours). The aim of this course is to explore the relationship between theory and practice by trying to put theory into practice. The course will involve a short initial period of lectures and seminars when various theoretical positions will be presented and discussed. Following this, students will select areas of study which should take them out of The College and into other social institutions. It is anticipated that students will select topics which involve such dilemmas as school-community relationships, inter-disciplinary approaches to education, Canadian issues in education, student-teacher relationships, morality and the drug culture, and so on. The final weeks of the course will involve a consideration and evaluation of the work undertaken and the method adopted.

4263 *Modern Philosophy and Education* (2 hours). Through the examination of selected modern philosophical works, this course will deal with such key problems (among others) as human freedom, coercion in the classroom, the problem of absurdity, social philosophy and educational theory, approaches to student-centred

education, the influence of modern philosophy on methodology in education. Conflicting viewpoints in recent philosophy will also be introduced and examined speculatively in an educational context.

4264 *Progressive Education in Theory and Practice* (2 hours). An analysis and discussion of progressive theories and practices over the past two hundred years, with special reference to the ideas of Rousseau, Dewey, and Ontario's Hall-Dennis Report, for the purpose, in the main, of inducing beginning teachers to search constantly for meaning in such familiar learning concepts as interest, activity, discovery, assimilation, freedom, authority, natural growth, creativity, continuous progress.

4265 *School and Society* (2 hours). This course will involve a consideration of such problems as socio-cultural influences on educational achievement, value conflicts (between generations and among socio-economic classes), and the conflicting functions of the school as an institution for transmitting the cultural heritage as well as criticizing it. An analysis of these problems will uncover such issues of current concern to schools and teachers as 'the generation gap', 'educational control', 'student power'.

4266 *Sociology of Education* (2 hours). An examination of the school as an institution in the society which it serves. Topics will include the structure of society and education, education and social change, education and social mobility, the socialization of the child, the social rôle of the teacher, the influence of economic and political forces on education, education and the values of the community and the nation, education and international relations. Students will be expected to relate the principles discussed to their own communities. Previous university work in sociology is desirable but not mandatory.

4267 *Values in Education* (2 hours). An examination of selected topics in value theory seen within the educational context. Examples of possible topics: authority and freedom; perception and judgment in education and the arts; the aims of education; valuation impact of the mass media; the teacher and the new morality; expression, representation, and value formation; conceptual analysis of the educational environment. No formal background in philosophy is required.

4268 *Individual Research Project* (2 hours). Qualified students who wish to substitute an independent study project for one or two (not more) courses in this Department, must first obtain the approval of a member of the Department and subsequently of The Council of The College.

4269 *Authority and Freedom in School* (4 hours). Can an ideal of individual freedom be supported? Can authority be justified? Does the ideal of individual freedom preclude the exercise of authority? Should the school enforce a prevailing moral code? Can a school

be amoral? Is "compulsory education" a contradiction? Why b being ethical? This course will attempt to get at the roots of h ethical valuing and thereby illumine, and confront one with moral dimension of the school.

42610 *History of Canadian Education* (2 hours). This cours survey patterns and developments in Canadian education fro Indian cultures to the present. Particular attention will be pa the relationship of social changes in, for example, family life, cepts of childhood, living conditions, English-French relations the rôle of religion, to educational systems. Students will ha opportunity to examine original sources.

Courses offered in Part IV, Additional Related Studies

45528 *Educational Issues in Perspective* (2 hours). The inte is to seek an understanding of basic – *ipso facto* contempo issues in education through examining the writings of sel educators of the past and present. Students will have a voi selecting themes and authors, and will be expected to share i reading, the presentation of papers, and the exchange of through class discussion upon which the success of this cours largely depend.

45511 *History of Education: A Reading-Discussion Cour* hours). For a course of this kind enrolment is limited to se proportions. Students are invited to share the reading and s quent discussion of selected influential educational writing famous or well-known writers, past and contemporary. The i tion is to learn from direct sources and to see current develop in this perspective.

45533 *Marxist Educational Theory* (2 hours). Not offere 1971–72.

45534 *Philosophy and Education in the Classical World* (2 ho Selected topics in classical philosophy and education treate historical perspective. Attention will be given to the contemp significance of classical thought. A background in classics, an history, or philosophy may be helpful but is not required. All w studied will be in translation.

45535 *Jean-Paul Sartre and Education* (2 hours). An in-depth s of Sartre's *Being and Nothingness* with a view to explorin implications of his thesis re human freedom for education. Thi seminar course and students should have some acquaintance the work of Sartre or with existentialism in general.

45536 *Problems in Canadian Education* (2 hours). A readin cussion course where students will select for individual study a ticular problem or theme in the history of Canadian education example: technical and vocational education, the kinderg movement, progressive education, ethnic groups and assimila

urbanization, rural problems, the rôle of the state, or the changes that have taken place in the aims and content of certain school subject areas such as health education, physical education, history, literature, the mathematics or the sciences.

58. Home Economics Program for ntermediate Certificate

428 *Home Economics* (8 hours). The development of Home Economics in Ontario schools; present trends, values, aims; responsibilities of the Home Economics teacher for curricular and extra-curricular programs.
Curricula: materials, procedures, content.
Teaching methods and techniques currently applied in this field.
Evaluation: objectives and materials.
The Home Economics classroom; selection, arrangement and care of furnishings and equipment.
Records, budgets, regulations.
Each student will participate in a program of individual and group studies of problems of families and communities, and problems of pupils and teachers, involving professional reading and field experiences.

528 *Seminars in Home Economics* (2 hours). For Type A candidates in Home Economics.
A study of Home Economics education as it relates to the Canadian family, with emphasis on readings in current literature and discussions on basic problems of Home Economics teaching. Students will become familiar with resource materials, with ideas expressed by outstanding workers in the field, and will develop a strong philosophy needed for potential leadership.

ustrial Arts

430 *Industrial Arts* (8 hours). A program which gives credit for Part I of the two-part sequence leading to the Elementary Certificate in Industrial Arts.
This program consists of two types of experience. The first type includes lectures and laboratory experience in material science, design technology, environmental design, fabrication and production. Problems are presented to develop creative abilities, experimentation, and the required hand and machine skills to work with a variety of materials and processes. Factors controlling the design and planning of objects in the man-made environments are studied and applied in practical work.
The second type includes methods of instruction in Industrial Arts and practice teaching.

Courses offered in Part IV, Additional Related Courses

45530 *Art and Crafts for Elementary Schools* (See Page 45).
45514 *Design Education* (2 credit hours). (See Art Education, page 50.)

n and Greek

432 *Latin and Greek* (5 hours in Latin, 3 hours in Greek). An examination of methods in various aspects of the teaching of Latin

and Greek, including: oral reading of prose (Caesar, Livy, N and poetry (Virgil, Ovid); morphology; grammar and sy derivation; audio-visual aids and interest devices; historical ground of prescribed authors.

532 *Seminar in Classics* (2 hours). For Type A candidat Classics, Latin, Latin and Greek and, in part, Latin and Fr English and Latin, and Latin and Italian. An examinatic methods applicable to the prescribed courses in Grade 13 Lati Greek authors for the current year involving a study of ade translation and of literary appreciation of the prescribed pas the philosophy of Horace; Hexameter, Elegiac, Sapphic and A metres.

61. Mathematics

434 *Mathematics* (5 hours). A consideration of the pla mathematics in elementary and secondary education; objecti the mathematics teacher.

Classroom procedures and teaching methods, Grade 1 th Grade 12, of a balanced student-centred teaching program incl methods designed to obtain maximum student involvement i discovery and development of mathematical concepts and niques; individual, small group, and large group methods; teaching involving curriculum planning and execution as a effort; laboratory techniques; use of multi-media, audio- materials, calculators, models and other instructional mat interdisciplinary approaches, environmental studies; use o mathematics workshop to promote understanding and confi and develop powers of enquiry and creativity; seminar method of socratic discussion; research; testing and evaluation; teachi four-year and two-year classes.

Contemporary trends in mathematics and their implications f elementary and secondary schools; history and developme mathematics; foundations of algebra and geometry; fundar concepts of logic; applications of mathematics.

534 *Seminar in Mathematics* (4 hours). For Type A candida Mathematics and, in part, Mathematics and Physics.

A consideration of secondary school mathematics from a vanced point of view; methods of presenting topics of the seco school mathematics program with particular emphasis at the 13 level; developments in mathematics and the implicatior senior secondary school mathematics programs; curriculum opment; organization and administration of the secondary s mathematics department.

Course offered in Part IV, Additional Related Courses

45523 *Research Project in Mathematics Education* (2 hour study in depth of a selected problem in mathematics edu involving a combination of seminar, laboratory work and

experience. This study is intended for students who are primarily interested in the teaching of mathematics. Enrolment is limited.

Iniversity of onto Course Mathematics

303 *Mathematics* (3 hours). An introduction to higher mathematics including a study of some secondary school topics from an advanced point of view. This course is open to students having at least 12 credits in university mathematics.

NOTE: This course in Mathematics is offered to provide particular background pertinent to the teaching of secondary school mathematics. This course carries 3 credits toward qualification for endorsement of the High School Assistant's Certificate, Type B, and for the Type A Certificate. Mathematics 303 may be taken as an Additional Related Course as indicated in Part IVb(ii), page 34.

63. Modern ges: French, man, Italian, ian, Spanish

436 *Modern Languages* (4 hours per language)

METHODOLOGY:

Current aims; specific objectives at secondary and primary levels; curricula; materials.

Procedures; specific techniques in audiolingual presentation; the written language; vocabulary acquisition; inductive approach to language generalizations; teaching literature.

Lesson planning (initial, series, review).

Tests and examinations, both oral and written; administration; marking.

APPLIED PHONOLOGY:

Description of the sounds; intonation; accent; discrimination and production on the part of the learner; standards of phonemic and phonetic accuracy (where pertinent); remedial drills; error detection by the teacher; counselling techniques and practice.

CONVERSATION:

Free and guided discussions; leadership practice.

LANGUAGE PRACTICE:

Current usage, emphasizing the spoken language; laboratory drills with pedagogical bias; testing program. (Additional laboratory time may be required of those in need of remedial work.)

536 *Seminars in Modern Languages* (2 hours for each language). For Type A candidates in French, French and German, French and Italian, French and Russian, French and Spanish, and, in part, Latin and French, Latin and Italian, English and French, English and German, English and Spanish, English and Russian, and Latin and Spanish.

Study in depth at all levels, as outlined in the Courses of Study and Curricula issued by the Department of Education; stress on methods of presenting work at the Grade 13 level.

For Type A candidates in French (2 additional hours). Se topics, such as linguistics, reference works, learning theory, culum, resource materials, course organization, leadership, lan laboratory hardware.

Courses offered in Part IV, Additional Related Courses

45501 *Applied Linguistics* (2 hours). Study of different ap tions of linguistic theories to the teaching of French; s attention to problems of phonemics, morphology, syntax semantics in connection with the data of structural linguistics course is open to any student of French.

45529 *Culture and Society as it relates to the teaching of F* (2 hours). Historical, social and regional factors, with empha French Canada.

45502 *Culture and Society in German Language Teaching* (2 h Historical, social and regional factors in the teaching of m German; a laboratory approach. This course is open only to st enrolled in German as a teaching subject.

45507 *Electronic Aids to Language Learning* (2 hours). aids including language laboratory; scripting and taping o grams; film and video production; equipment manipulation course (which pre-supposes an interest in, but no knowled electronic aids) is open to any student of a Modern Lan except those students enrolled in courses leading to the Type tificate in French.

45521 *French at the Elementary School Level* (2 hours). F as a second language from the earliest grades of the elem school; programs; procedures specific to the age level; audio- aids.

NOTE: This course may be chosen by

i a candidate enrolling in the Elementary School option as w in French;

ii any candidate proceeding to a Type A certificate in French (alone or in combination with another Type A field).

64. Music, Instrumental Part 1 of the Program for the Intermediate Certificate

438 *Music, Instrumental* (6 hours). This is a practical emphasizing the individual mastery of instruments and meth class teaching, and may be taken only in conjunction with Music.

538 *Seminar in Instrumental Music* (3 hours). For Type A dates in Instrumental Music. An appraisal of current trends junior and senior levels; the materials used; the aims of the t Advanced ensemble techniques; original works or arrangeme the ensemble.

usic, Vocal art 1 of the am for the termediate Certificate

440 *Music, Vocal* (5 hours). The musical experience; listening materials; sound exploration; manipulation of sound; symbols of music; musical procedures.
Techniques of choral production; conducting; song materials.

540 *Seminar in Vocal Music* (3 hours). For Type A candidates in Vocal Music. Comparative studies of current aesthetics and practices; advanced choral techniques; vocal materials; original choral compositions; problems in the developing of aural responsiveness to varied musical expressions; examination of sound manipulations and formal procedures; multi-media presentations.

Course offered in Part IV, Additional Related Courses

45537 *Chamber Music* (2 hours). This study will include performance as well as listening and analysis. Candidates, preferably wind and string players, will be required to audition before being accepted into the course.

hysical and n Education

442 *Physical and Health Education – Women* (8 hours).
4421 *Physical and Health Education – Men* (8 hours).
Part I of the Program for the Intermediate Certificate:
An introductory course in principles and practices of Physical and Health Education. Emphasis is placed on methods of teaching the physical activities and health materials outlined in the Courses of Study, Grades 7 to 10, of the Ontario Department of Education.

4422 *Physical and Health Education* (4 hours). Part II of the Program for the Intermediate Certificate:
An introduction to the scientific bases of Physical and Health Education. The course includes methods and materials for Grades 11 and 12; scientific principles; historical developments; introduction to statistical methods; program planning.

4423 *Physical and Health Education* (4 hours). Program for the Specialist Certificate:
Emphasis is placed on advanced methodology; philosophic and scientific principles; organization and administration of all aspects of Physical and Health Education in the school situation.

542 *Seminar in Physical and Health Education* (10 hours). For Type A candidates in Physical and Health Education.
The Seminar is concerned with: educational concepts relative to Physical and Health Education; scientific principles relative to human movement; organization and administration of all phases of the secondary school Physical and Health Education program; advanced methodology and teaching techniques.

Courses offered in Part IV, Additional Related Courses

45504 *Current Health Problems in North American Society* (2 hours). Survey course including lectures and seminars related to

such health areas as cardiovascular disease, mental health, a water pollution, consumer health, drugs, and sex education.

45515 *Outdoor Education* (2 hours). An introductory emphasizing the use of the outdoor environment as an educ media. An interdisciplinary program which includes lecture seminars and devotes a considerable amount of time to field

67. Political Science

444 *Political Science* (4 hours). A series of lectures and se with specific reference to classroom practice:
A survey of the World Politics and Civics curricula as set the Department of Education; methods and materials in the ing of World Politics and Civics; the content of the World and Civics courses; principles of course construction; exami and evaluation of a variety of approaches to the teaching of Politics and Civics; motivation; evaluation; dealing with ind differences.
Preparation of a course of study in Economics.

544 *Political Science* (4 hours). For Type A candidates in P Science and in Political Science and Economics.
A series of lectures and seminars with emphasis on the pr application of the following:
The nature of Political Science; aims and methods in the te of Economics; the content of an Economics course; princi course construction; the examination of a number of approa the teaching of the subject, e.g. those of Fenton, Senesh, Olive evaluation; individual differences.
Preparation of a course of study in World Politics or Civics.

68. Psychology and Sociology

446 *Psychology and Sociology* (4 hours). The value and obj of the secondary school course 'Man in Society'; planning; m of presenting various areas of the course; demonstrations a cussion of specific techniques; relationship of 'Man in Soci other secondary school subjects and to Guidance.

546 *Seminar in Psychology and Sociology* (2 hours). For candidates in Psychology, Sociology, or Psychology and Soc The seminar concerns itself with objectives, content and te methods for certain areas of the course 'Man in Society'; t of the specialist in the secondary school.

69. School Librarianship

448 *School Librarianship* (12 hours). Basic training for tho may wish to serve as secondary school librarians.
Instruction in the School Media Centre collection with pa attention to recreational, biographical, scientific and basic re materials; School Media Centre program and adminis organization of materials in the School Media Centr laboratory periods for practice; seminars for discussion of n and student presentations.

As enrolment in this course is limited, candidates will be selected on the basis of a personal interview with a member of the faculty of the School Librarianship Department. Candidates accepted for School Librarianship should consider selecting course 45506 Educational Media, as their Additional Related Course.

This course in School Librarianship is Part I of a two-part program leading to the Intermediate Certificate in School Librarianship. The course cannot be completed during the One-Year High School Assistants' Program but requires for the Intermediate Certificate a summer session subsequent to one year of successful experience in a school library.

Science

450 *Science* (4 hours). The rôle of Science in elementary and secondary education; the aims and objectives of Science; Science curriculum design; unit planning and lesson planning; a study of representative portions of contemporary Science courses; an examination of the various approaches to the teaching of Science; procedure and methods used to obtain maximum student interest and participation; recognition of individual student differences; the use of audio-visual aids in Science teaching; source materials; the purchase, maintenance and use of equipment; testing and evaluation.

550 *Seminars in Science.* The methodology and content of the Science programs in the Senior Division; the oragnization of the Science programs; the rôle of the specialist teacher and the Department Head.

55001 Seminar in Biology (2 hours)

55002 Seminar in Chemistry (2 hours)

55003 Seminar in Physics and, in part, Mathematics and Physics (2 hours)

Courses offered in Part IV, Additional Related Courses

45509 *Environmental Studies in Science* (2 hours). This course consists chiefly of the development of environmental studies that can be performed by secondary school students of Science. Areas of study include ponds, streams, forests, grasslands, wetlands, sand dunes, soils, and environmental pollution. Field experience is provided. A background in ecology is desirable.

45540 *Science in the Elementary School* (2 hours). A course for Type A candidates in Science, or Biology, or Chemistry, or Physics, or Mathematics and Physics. A study of the science programs currently used in elementary schools; teaching techniques and procedures specific to age level; correlation of Science in the senior elementary grades and the junior secondary grades.

ıtre Arts

4521 *Theatre Arts, Part 1. Improvised Drama and Production* (4 hours). An introductory course which concerns itself both with

improvisational and scripted drama as well as with theatre pro
tion. Through exercises in sense awareness, movement and p
making, possibilities for expanding imagination and concep
development are explored. The course concerns itself with im
visation as a means of personal development and as a lear
technique. It is primarily designed as a beginning course for
teaching of Theatre Arts and constitutes the first part only of
requirements for the Theatre Arts Certificate. Candidates wis
to obtain the Certificate will be required to attend a further sum
session.
Because of the nature of Theatre Arts, enrolment is limited.
applicants will be required to have a personal interview wit
member of the Theatre Arts Department as part of the selec
process.

4522 *Theatre Arts, Parts 1 and 2. Drama and Communication*
(9 hours in addition to regular evening and weekend works
sessions).
A course which deals with the philosophy and practice of Dr
in Education; the purposes of curricular and extra-curricular dra
creative drama; direction; production; study in the imagina
concepts and structures of the aural and visual media; plan
developmental programs; mixed media presentations.
This course consists of group projects frequently culminatin
performance. It is specifically designed for those who wish, im
diately upon securing the High School Assistant's Certificate, Typ
and the Theatre Arts Certificate, to seek employment as teac
of Theatre Arts.
Because of the nature of Theatre Arts, enrolment is limited.
applicants will be required to have a personal interview wit
member of the Theatre Arts Department as part of the selec
process.

552 *Seminar in Drama* (2 hours). For Type A candidates in E
lish and Drama. An individual research project concerning Dr
in Education selected by the candidate in consultation with
Theatre Arts Department.

Bachelor of Education Degree Programs Conducted by the Division of University Extension

achelor of on Degree ogram for tes of the ar Course or to 1970

Bachelor of Education Degree Program for graduates of The College of Education who were awarded the High School Assistant's Certificate prior to May, 1970. Commencing September, 1970, the Division of Extension, University of Toronto, is offering a program in summer and winter sessions which will enable graduates of the one-year College program prior to May, 1970, leading to the Interim High School Assistant's Certificate, Type B, to qualify for the Bachelor of Education Degree.

PROGRAM: A candidate must complete two of the courses in the present one-year program leading to the Bachelor of Education Degree, namely:

a one course selected from a list of offerings in *Part II, Educational Theory,*

b one course selected from a list of offerings in *Part IV, Additional Related Courses.*

NOTE:

i The summer day sessions, beginning in 1971, will be of six weeks' duration.

ii The course in each subject will be thirty class hours.

iii A candidate may take one or two courses in winter or summer session.

iv It may be necessary to limit enrolment in certain courses.

v A course will not be offered unless sufficient candidates apply.

vi This program will not be offered after July 1, 1974.

Admission Requirements: A candidate must submit to the Office of Admissions, University of Toronto, proof of:

a graduation from *The College of Education* in a One-Year High School Assistants' program, Type B, prior to May, 1970;

b Possession of the Permanent High School Assistant's Certificate.

Enquiry and Application: Division of Extension, University of Toronto, 84 Queen's Park Crescent, Toronto 181.

chelor of Degree: Program

Bachelor of Education Degree Program for holders of Ontario permanent basic teaching certificates. Commencing July, 1971, the Division of Extension, University of Toronto, will offer a program in

summer and winter sessions which will enable graduates who mee
admission requirements outlined below to qualify for the Bachel
Education Degree.

PROGRAM: A candidate must complete four of the courses in
present one-year program leading to the Bachelor of Educa
Degree, namely:

a one course selected from a list of offerings in *Part II, Educati
Theory,*

b one course selected from a list of offerings in *Part IV, Additi
Related Courses,*

c two additional courses selected from *Part II, Educational Th*
or *Part IV, Additional Related Courses.*

NOTE:

i The summer day sessions, beginning in 1971, will be of six we
duration.

ii The course in each subject will be thirty class hours.

iii A candidate may take one or two courses in winter or sum
session.

iv It may be necessary to limit enrolment in certain courses.

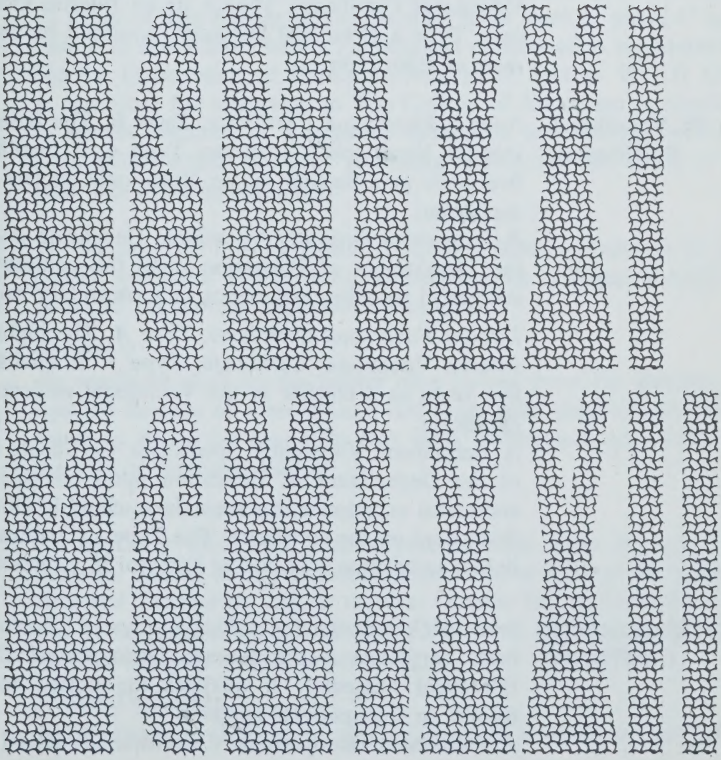
v A course will not be offered unless sufficient candidates apply.

Admissions Requirements: A candidate must submit to the Offic
Admissions, University of Toronto, proof that he holds:

a an approved university degree from an accredited university
Section 25, page 27);

b a permanent basic Ontario teaching certificate.

Enquiry and Application: Division of Extension, University
Toronto, 84 Queen's Park Crescent, Toronto 181.



One-Year Programs for Certificates in Techn Education and Industrial Arts
(A) Vocational or Occupational Certificates Bachelor of Education Degree

73. Bachelor of Education Degree and the Interim Vocational Certificate, Type B, or Interim Occupational Certificate, Type B (Practical Subjects)

The degree of Bachelor of Education will be awarded to a s who holds an approved degree from a recognized universit has the required number of years of wage-earning experienc meets the other admission requirements peculiar to his subje and who also successfully completes the one-year program l to the Interim Vocational Certificate Type B or the Interim pational Certificate Type B (Practical Subjects), awarded Ontario Department of Education. (See also Page 27.)

Other candidates with suitable academic standing and wage-e experience may enter a One-Year Program leading to an I Vocational Certificate, Type B or an Interim Occupational cate, Type B (Practical Subjects), awarded by the Ontario D ment of Education.

74. Vocational Certificates

Interim Vocational Certificate, Type B. The basic certificate Interim Vocational Certificate, Type B. It qualifies the hold five years as a teacher in the Vocational subject designated certificate.

A Permanent Ordinary Vocational Certificate may be reques the Department of Education upon the completion of two successful teaching experience in a secondary school in Onta

Interim Vocational Certificate, Type A. The higher certificate Interim Vocational Certificate, Type A. It qualifies the hold five years as a teacher in the Vocational subject designated certificate.

A Permanent Vocational Specialist's Certificate may be req of the Department of Education upon completion of two successful experience in a secondary school in Ontario in the s designated on the certificate. The Type A Certificate may quali holder to become a Technical Director in a secondary school.

75. Occupational Certificates

Interim Occupational Certificate, Type B (Practical Subjects) basic certificate is the Interim Occupational Certificate, T (Practical Subjects). It qualifies the holder for five years teacher in Occupational subjects.

A Permanent Occupational Certificate (Practical Subjects) m

requested of the Department of Education upon completion of two years' successful experience in a secondary school in Ontario.

Interim Occupational Certificate, Type A. The higher certificate is the Interim Occupational Certificate, Type A. It qualifies the holder for five years as a teacher in Occupational subjects.
A Permanent Occupational Specialist's Certificate may be requested of the Department of Education upon the completion of two years' successful experience in Ontario. The Type A Certificate may qualify the holder to become a Director of an Occupational Department.

76. General Conditions of Admission

An applicant for admission to the One-Year Program leading to certificates in Vocational, Occupational, or Industrial Arts must make application, not later than August 15, to the Director of the Department of Technical and Industrial Arts, 371 Bloor Street West, Toronto 181, Ontario, on a form to be obtained from him, and shall submit with the application:

A certificate of birth

If not born in Canada, the candidate must submit a certificate from a competent authority that he is a Canadian citizen or has Landed Immigrant status or has applied for Canadian citizenship. For the Interim Vocational Program, male applicants shall be at least 23 years of age; female applicants shall be at least 21 years of age. This is in accordance with a Department of Education requirement. See the Department of Education Act, 1954, Section 11, (1) (c). A candidate for admission to The College of Education is required to submit evidence of a negative tuberculin test reading or chest x-ray taken within the year preceding September 20, 1971, or to take such a test on admission.

Requirements Admission to ogram for the im Vocational ficate, Type B or Interim Occupational ficate, Type B

To this program may be admitted Applied Science graduates (engineers), graduates of Polytechnical Institutes or Colleges of Applied Arts and Technology, and skilled tradesmen.

Engineers

An applicant shall be the holder of a degree from the Faculty of Applied Science of a recognized university, and shall submit statements to prove not less than two years' subsequent experience in the field of his major subject.

Technologists and Technicians

An applicant shall hold a three-year diploma from an approved program offered by a Polytechnical Institute or College of Applied Arts and Technology, which requires Ontario Grade 12 standing as one of the conditions for admission. He must also document three years of acceptable work experience.

Skilled Tradesmen

An applicant is required to give evidence of a minimum academic

education of Ontario Grade 12, or equivalent, and approved tr
training and experience, generally seven years.
The training or apprenticeship required shall be that demanded
journeyman's qualifications in the trade concerned. Special train
obtained in an approved day vocational school will be taken i
account in considering the period of training. An applicant sh
submit statements from the persons or firms under whom they w
trained, showing the length of the training period and the nature
the work.
The experience required shall be several years of wage-earn
journeyman trade experience with reputable firms, and shall
such as to show that the applicant is a skilled craftsman, compet
in the main branches of the trade concerned, and familiar with
recent development. The length of the journeyman experie
depends upon the nature of the trade. Documentary evidence
experience in the trade in approved shops shall be furnished
the applicant.
An applicant for the Interim Occupational Certificate, Type
(Practical Subjects), shall furnish proof of wage-earning experie
over at least seven years and involving at least three trade areas
In calculating the total years of wage-earning experience and
training, only those years subsequent to the date of the high
academic attainment used in the calculation can be credited un
the academic program of the candidate was interrupted for a nu
ber of years during which he was engaged in such wage-earn
activity.

NOTES:
1 In all cases the name of the degree, diploma, or apprentices
must correspond with both the nature of the wage-earning experie
and the subject to be taught.
2 A minimum of two years of Canadian wage-earning experie
is required.
3 As of September 1, 1971, successful completion of the pract
portion of the Technical Proficiency Examination is also requi
This is a performance test.

78. Requirements for Admission to the Program for the Interim Vocational Certificate in Home Economics

To this program may be admitted graduates with satisfactory sta
ing in a three-year Secondary School Home Economics teach
option of a polytechnical institute or equivalent. Wage-earn
experience is not a prerequisite for admission to this progr
Because of the nature of this program, enrolment may be limi

NOTES:
1 Home Economics is offered in the One-Year Program only.
2 Applicants should pay particular attention to the fact that
Vocational Type A Certificate is offered in Home Economics.
candidates must obtain an acceptable B.A. degree before they

eligible to proceed to higher certification through the High School Assistants' Program.

equirements Admission to gram for the n Vocational Occupational icate, Type A

This program is offered to graduates of a Faculty of Applied Science or a Faculty of Architecture or graduates holding the B.SC.N. from a recognized university, with at least 70% or B, whichever is higher, in the final and one other year.

Each candidate shall:

1 submit evidence of not less than two years of approved wage-earning experience in the field of his major subject;

2 be required to take the courses of the Program for the Type B Certificate, and to obtain a grading of 70% or B, whichever is higher;

3 take additional courses in the organization, administration, and supervision of vocational schools, educational measurements, curriculum development, comparative education, and philosophy of education.

Program for the Interim Vocational or Occupational icate, Type B

The program consists of five parts:

Part I Teaching Subjects
Part II Educational Theory
Part III Professional Practice
Part IV Additional Related Courses
Part V Technical Proficiency Examination.

Part I ing Subjects

Teaching Subjects

a All candidates will take the course *Methods of Teaching the Technical and Industrial Arts* 471

b In addition a candidate must elect one course from the following:

Principles and Practices of Vocational Education 472
Principles and Practices of Occupational Education 473

Part II tional Theory

Educational Theory

All candidates will take the following courses:

Structural and Legal Bases of the Ontario School System 4001
Educational Psychology as Applied to Vocational Education 463
History and Philosophy of Vocational Education 467
Curriculum Development for Vocational Subjects 479

Part III Professional Practice

Professional Practice

Observation and Practice Teaching is a program of from ten to twelve weeks. The program is conducted in Ontario secondary schools. Assignment of students to practice schools is made outside as well as within the area of Metropolitan Toronto.

Candidates entering the course must be able and willing to accept practice teaching assignments to those schools selected by the Director and Associate Director of Practice Teaching. Candidates

absent from regular practice teaching weeks will be required make up the assignment at the end of the term.

Part IV Additional Related Courses

Additional Related Courses

a All candidates will take the courses

English – Rhetoric and Semantics 45

English – Workshop

b In addition, a candidate must elect one course from the follow

Mathematics

Special Education

Part V Technical Proficiency Examination

Technical Proficiency Examination

Theory

Every applicant shall be required to pass a written examina designed to test his attainments as a skilled worker in the sub concerned. The examination shall be on the fundamental princip operations, processes, and skills of the subject.

I. Program of Studies One-Year Session Leading to the Bachelor of Education Degree

Program of Studies, One-Year Session leading to the Bachelor of Education Degree

To this program may be admitted a candidate who holds an appro degree in engineering, architecture, nursing, arts or science fro recognized university. Successful candidates with Canadian citizen or Landed Immigrant status will be recommended to the Ont Department of Education for the Interim Vocational Certific Type B, or the Interim Occupational Certificate, Type B (Pract Subjects).

The program consists of five parts:

Part I Teaching Subjects

Teaching Subjects

As in Part I, Section 80.

Part II Educational Theory

Educational Theory

a All candidates will take the courses

Structural and Legal Bases of the Ontario School System 4

Curriculum Development in Vocational Subjects

b In addition, a candidate must elect two courses from those offe by two departments as shown in Part II (b), Section 28, Pages 31-

Part III Professional Practice

Professional Practice

As in Part III, Section 80.

Part IV Additional Related Courses

Additional Related Courses

These courses offer a candidate the opportunity to concentrate ther on one of his teaching subjects by taking a related course

to pursue an interest in another teaching subject or in the field of general education.

A candidate must elect one course from Part IV, sub-sections (a) or (b), Section 28, Pages 32–34.

Part V Technical Proficiency Examination

Technical Proficiency Examination

As in Part V, Section 80.

Details of Courses in the Program for the Inte Vocational or Occupational Certificate, Type B

NOTE: In each case, the numeral in brackets indicates the numbe lecture hours per week.

82. Administration and Program Development

4001 *The Structural and Legal Bases of the Ontario School Sys* (1 hour). The organization of provincial and local systems of cation; powers and duties of the various educational authori the Education Acts and Regulations of the Province of Onta Course content will be covered primarily through directed readi Lectures will be given on related topics of current educati interest. The course is conducted by the staff of the Departmen Administration and Program Development.

83. Educational Psychology

463 *Educational Psychology as it relates to Vocational Educa* (3 hours). An introductory course designed for teachers of Technical and Industrial Arts. As such, special reference is g to the application of educational psychology to teaching and le ing as applied to practical subjects.

Areas explored include development and adjustment, motivat intelligence and its measurement, and the learning process with st on motor learning. Theoretical approaches are examined in term their practical applications.

84. History and Philosophy of Vocational Education

467 *History and Philosophy of Vocational Education* (2 hou Designed to acquaint the student with the historical developmen education and the philosophical concepts which underly it. topics are set forth to show the vocation aspects of educati developments from the Ancient World to the present and to re the theories and practices of education as advocated by s thinkers as Plato, Comenius, Rousseau, Locke, Pestalozzi, Fe berg, Della Vos, Seath, Dewey and Whitehead.

Stress will be placed on the influence of these philosophers on rent vocational practice so that a proper perspective may be ga as we examine the various facets of general educational practic

85. Teaching Subjects

Teaching Subjects

471 *Methods of Teaching the Technical and Industrial Arts*

hours). Analysis of Formal Lesson Types; Lesson Planning; The Art of Questioning; Inductive and Deductive Reasoning; The Teaching and Learning of Concepts and Principles; The Teaching and Learning of Skills; Problem Solving; Creativity, and Discovery Learning; Audio-visual Aids in Teaching; Individual Instruction; Group Dynamics in Teaching; Practice Lessons; The Nervous System; Relation to Learning; The Learning Process; Definitions, Theories, and Types of Learning; Efficient Study Methods; The 'Laws of Learning'; Direct and Indirect Experiences; Habits and Habit Formation; Motivation; Individual Differences; Economy and Techniques of Learning; Making Learning Efficient.

472 *Principles and Practices of Technical Education* (4 hours). Aims of Education; A Taxonomy of Educational Objectives; (a) The Cognitive Domain, (b) The Affective Domain, (c) The Psychomotor Domain; Profile of an Ideal Teacher; Human Relations in the Classroom; Teacher Attitudes; Professional Ethics; Public Relations; The Preparation of Instructional Objectives; Evaluation of Teaching; Routine Duties; Construction and Administration of Tests and Examinations: Statistical Analysis of Scores, Measuring and Recording Pupil Progress; Preparation of Instructional Materials; Instruction Aid Sheets; Audio-Visual Media; Discipline; Homework and Notebooks; Team Teaching.

473 *Principles and Practices of Occupational Education* (4 hours). Same as 472 with the addition of Special Education 475.

Curriculum opment for Vocational/ ccupational Education

Curriculum Development for Vocational/Occupational Education

479 *Subject Analysis* (1 hour).

480 *Course of Study* (1 hour). Study of the work of the skilled craftsman to determine the teachable content of each trade or calling. Analysis of the subject to determine the skill, and the trade, technical and concomitant knowledge of the skilled worker; selection of instructional materials and arrangements into groups according to learning difficulties; selection of projects to be used to fit the order of the course of study; determination of related mathematics, science, drawing and auxiliary information needed in each project; preparation of the course of study; unit courses.

481 *Preparation of a model shop plan*

482 *Preparation of an equipment list and budget*

Vocational Economics

Candidates will be required to take Educational Psychology, English (Rhetoric and Semantics), History and Philosophy of Vocational Education, Principles of Teaching, Structural and Legal Bases of the Ontario School System. For details, see Details of Courses for the Interim Vocational Certificate, Type B. (Sections 82, 83, 84, 85, 88)

483 *Methods of Teaching Home Economics* (10 hours). Philoso
and Techniques of Teaching:
History of Home Economics in Ontario schools; the option p
gram; Home Economics curriculum related to the fundame
principles, practices and standards in home and family living.
of the Ontario Curriculum guides; planning lessons and un
Teaching techniques and instructional materials. Problems
organization; equipment, texts and references. Evaluation, reco
budgets, regulations.

APPLIED METHODS:
Use of special teaching techniques in preparation and teaching
selected lessons suggested in the Ontario Curriculum guides
Home Economics. Use and preparation of instructional materi

NOTE:
Candidates in Vocational Home Economics will be required
attend provincial schools for Observation and Practice Teaching
Home Economics classes for ten weeks during the session. Stude
who are absent from regular practice weeks will be required to
other assignments later in the session.

88. Additional Related Courses

45513 *Introduction to Vocational, Occupational, and Industr
Arts Education* (2 hours). Types of certificate, the admission
quirements, history, philosophy, and the means of realizing t
aims of these three types of education.

45539 *English* (2 hours Rhetoric and Semantics)

466 *English* (1 hour Workshop)

RHETORIC:
An introduction to the methods and patterns of clear and effecti
writing, relationship between thinking and the composition proce
perceptive seeing; organization of stimuli and meaningful transmi
sion of response; rhetorical considerations in the composition
sentences and paragraphs; characteristics and techniques of effecti
identification, definition, classification, comparison and contra
illustration, and three types of analysis: functional, process a
causal. The planning, evaluation and assignment of compositio
of various types is a significant part of this course.

INTRODUCTION TO SEMANTIC PRINCIPLES:
Abstract and concrete terms; problems in definition; characteristi
of words; denotation, connotation, language and personality; pro
lems in verbal communication.

ORAL PRESENTATION:
Communicating with an audience; eliminating self-consciousnes
voice-improvement; oral reading; phrasing oral questions; bri
prepared speeches; evaluating oral presentation; characteristics
effective lesson presentation.

Before beginning this course, some formal preparation may be advisable for candidates who lack command of basic English structure and usage.

469 *Mathematics* (2 hours). A course designed to acquaint the students with mathematics as taught at the secondary level including a *core* of topics involving operations with fractions and decimals, the solution of linear equalities and inequalities, formulae, ratio and proportion, powers and roots; *elective* topics chosen from trigonometry, problem solving, the slide rule, estimation and scientific notation, mathematical structure, relations and graphs, calculus.

475 *Special Education* (2 hours). A preparation for teaching 'non academic' students. It includes Philosophy, Methodology and Management of the various types of programs in the public school system, as well as some Psychology and Mental Health relating to slower learners.

(B) Industrial Arts Programs

89. Industrial Arts Certificates

Candidates with suitable academic standing, a basic Ontario te ing certificate, or equivalent, may enter a One-Year Program l ing to an Industrial Arts Certificate.

Interim Intermediate Industrial Arts Certificate

The basic certificate is the Interim Intermediate Industrial Arts tificate. It qualifies the holder for five years as a full-time tea of Industrial Arts in Divisions up to and including the Se Division.

A Permanent Intermediate Certificate may be requested of Department of Education upon completion of two years' succes experience in an elementary or secondary school in Ontario.

Interim Specialist Industrial Arts Certificate

The higher certificate is the Interim Specialist Industrial Certificate which is valid for five years. The holder may ask Department of Education for a Permanent Specialist Indus Arts Certificate upon the completion of two years' successful perience in Ontario in Industrial Arts teaching.

90. General Conditions of Admission

General Conditions of Admission

An applicant for admission to the One-Year Program for Ce cates in Industrial Arts must make application, not later August 2, to the Director of the Department of Technical Industrial Arts, 371 Bloor Street West, Toronto 181, Ontario, a form to be obtained from him, and shall submit with the a cation:

A certificate of birth

If not born in Canada, the candidate must submit a certificate f a competent authority that he is a Canadian citizen or has La Immigrant status or has applied for Canadian citizenship.

A candidate for admission is required to submit evidence of a n tive tuberculin test reading or chest x-ray taken within the prece year, or take such a test on admission.

ditions of ssion, the Interim ermediate Certificate

Candidates with suitable academic standing and an Ontario Elementary, High School Assistant's or Vocational Teaching Certificate, or equivalent, may enter a One-Year Program leading to an Industrial Arts Certificate.

NOTE:

Every teacher of Industrial Arts in an elementary school must hold an Elementary School Teacher's Certificate in addition to his Industrial Arts Certificate.

If a sufficient number of applicants apply a special half-year course beginning in January will be offered to those candidates who have:

1 successfully completed Parts I and II of the Elementary Industrial Arts Summer Program and Part I of the Industrial Arts Supervisor's Summer Program with a minimum of a B standing in the latter

or

2 successfully completed Parts I, II and III of the Elementary Industrial Arts Summer Program with a minimum of a B standing in Part III

or

3 successfully completed Parts I (seven-week course) and II (seven-week course) of the Elementary Industrial Arts Summer Program with a minimum of a B standing in Part II.

In all cases, candidates who do not have the required B standing are required to complete the full year program leading to the Intermediate Industrial Arts Certificate.

litions of sion, the pecialist ertificate

An applicant shall:

1 hold an Intermediate Certificate in Industrial Arts; and

2 subsequently, have at least one year of successful teaching in the field of Industrial Arts, as verified by the Director of Education in the area concerned; and

3 show evidence of having obtained not fewer than seven Grade 13 credits or approved equivalents, including two in English or français. It is recommended that the candidate include papers in Mathematics and Science.

e Interim rmediate ertificate

The program consists of four parts:

Part I Teaching Subjects
Part II Educational Theory
Part III Professional Practice
Part IV Additional Related Courses

Part I Subjects

Teaching Subjects

A candidate must elect the following teaching subjects:

Design Technology	4891
Design Environment	4892

Fabrication and Production
Material Science

Part II
Educational Theory

Educational Theory

A candidate must elect the following subjects:
Curriculum Development
Philosophy

Part III
Professional Practice

Professional Practice

Since each candidate enters the program with a teaching cert
he is given only three weeks in a practice school. His teachin
gresses from individual and group instruction to complete
of routine duties and class instruction. If possible, the candi
sent to an Industrial Arts room in an elementary school, a
high school, and a collegiate institute.

Part IV
Additional Related Courses

Additional Related Courses

Candidates at the present time are not required to take subject
this part.

94. Program for the Interim Specialist Certificate

Industrial Arts, Specialist

The program consists of four parts:
Part I Teaching Subjects
Part II Educational Theory
Part III Professional Practice
Part IV Additional Related Courses

Part I
Teaching Subjects

Teaching Subjects

A candidate must elect three of the following teaching subjec
Architectural Drawing and Building Construction
Communications
Electricity Technology
Electronics Technology
Metal Fabrication and Production
Wood Fabrication and Production
Plastics Fabrication and Production
Science Technology
Mechanics
Modern Materials
Recreational Activities – Crafts
Recreational Activities – Outdoor
Foundation Design
Fabrication and Production (Junior Grades)

Part II *Educational Theory*

l Theory

A candidate must take two courses from this part. He may choose from those courses listed below and those suitable educational theory courses offered by other departments of The College.

Dilemmas of Contemporary Education	4262
Comparative Education	566
Curriculum Development	581
Creativity and Problem Solving	567
Research Techniques	582

Part III *Professional Practice* 4682

essional Practice

Each candidate is given at least three weeks of practice teaching. The program is designed to satisfy the needs and interests of the individual candidate. Experimentation and the use of new methods is encouraged. The candidate is allowed to select the grade level for his practice teaching and, with the cooperation of the associate teacher, is given the opportunity to modify and evaluate the curriculum. A written assignment is also required.

Part IV *Additional Related Courses*

dditional Courses

Candidates at the present time are not required to take courses from this part.

Details of Courses in the Programs for the Interim Intermediate Industrial Arts Certificate and the Interim Specialist Industrial Arts Certificate

Intermediate

487 *Curriculum Development* (1 hour). A study of the proble involved in developing the program and environment for teach Industrial Arts. Lecture and Assignment.

4891 *Design Technology* (6 hours). Electricity and Electroni concepts, applications, power mechanics, and central control of el tricity; methodology and teaching techniques. Lecture and labo tory. Mechanics: simple machines and applications; fluid pow basic physics as applied to mechanics; methodology and teach techniques. Lecture and laboratory.

4892 *Design Environment* (6 hours). Introduction to basic e ments and principles of visual aspects of the environment, and process of designing, recording and communicating ideas in t and three dimensions; methodology and teaching techniques. L ture and laboratory.

491 *Fabrication and Production* (12 hours). The development basic skills in the use of hand tools and machines, and in the h dling of materials. Areas of study include the processing of natu and synthetic materials. Problem solving techniques are learned the acquired skills are applied. Methodology and teaching te niques. Lecture and laboratory.

493 *Material Science* (2 hours). The study of the structure a properties of materials related to sources; production and u Methodology and teaching techniques. Lecture and laboratory.

495 *Philosophy* (2 hours). Current educational thought: conte porary aims, problems, and practices in education, with particu reference to Industrial Arts education. The general purpose of course will be to present a philosophical insight to help stude appreciate modern educational issues. Lecture and seminar.

Specialist

5971 *Architectural Drawing and Building Construction* (4 hou An experimental approach to structures; a survey of current co and practices of the construction industry; a study of the mater of construction, their properties and use in modern construct with special attention to their effect upon architectural desig

group construction problem. Methodology and teaching techniques. Lecture and laboratory.

5972 *Communications* (4 hours). Techniques of visual communication applied to the design process and teaching methods including technical drawing, sketching, photography and video. Methodology and teaching techniques. Lecture and assignment.

5973 *Electricity Technology* (4 hours). Theory and test of devices such as motors, relays and solenoid valves. Such devices to be used with various sensors for heat, light, sound, pressure and strain. A study of automotive systems. Methodology and teaching techniques. Lecture and laboratory.

5974 *Electronics Technology* (4 hours). Semi-conductor theory with experiments and application; the use of experimental kits which provide suitable classroom problems. Methodology and teaching techniques. Lecture and laboratory.

5975 *Metal Fabrication and Production* (4 hours). Advanced study of metals as materials of construction; metal structures; methods of forming, assembly and treatment; tooling for production; design approaches, and application of theory and principles to a variety of metal fabrication fields. Methodology and teaching techniques. Lecture and laboratory.

5976 *Wood Fabrication and Production* (4 hours). Advanced problems dealing with forming, fabrication and processing of wood and allied materials; machine methods with an orientation toward design for production on a limited production basis. Methodology and teaching techniques. Lecture and laboratory.

5977 *Plastics Fabrication and Production* (4 hours). Study of material and means of production in greater depth applied to design fabrication problems. Methodology and teaching techniques. Lecture and laboratory.

5978 *Science Technology* (4 hours). Scientific principles applied in inventive construction cutting across activity boundaries. Methodology and teaching techniques. Lecture and laboratory.

5979 *Mechanics* (4 hours). Study and application of power sources and mechanical devices. Methodology and teaching techniques. Lecture and laboratory.

59710 *Modern Materials* (4 hours). Study of new materials and processes and their application in the Industrial Arts classroom. Lecture and laboratory.

59711 *Recreational Activities – Crafts* (4 hours). Study of craft materials and processes applicable to Industrial Arts teaching. Lecture and laboratory.

59712 *Recreational Activities – Outdoors* (4 hours). Design, con-

struction, and use of equipment related to outdoor recr
Lecture and laboratory.

59713 *Foundation Design* (4 hours). Concerned with the edu
of vision through the design process by exploring basic desig
cepts within the limitations of tools, materials and techniques.
dology and teaching techniques. Lecture and laboratory.

59714 *Fabrication and Production – Junior Grades* (4 hour
dustrial Arts activities for younger children.

4262 *Dilemmas of Contemporary Education* (4 hours). Se
tion 57, Page 60.

566 *Comparative Education* (4 hours). An introduction to
tional activities in other Canadian provinces and other coun
comparison of various educational systems. Lecture and assig

581 *Curriculum Development* (4 hours). The interaction of
and education; current curricular trends in Ontario edu
dynamics of curriculum development. Lecture and assignmer

567 *Creativity and Problem Solving* (4 hours). Psychol
problem solving; Psychology of perception; stages in logical p
solving; system approach; problem solving as an educationa
tegy; creative technology. Lecture and seminar.

568 *Research Techniques* (4 hours). Introduction to researc
niques.

Recommendation of Vocational, Occupational and Industrial Arts Certificates

Standing

The final standing of students in attendance in the program for the Vocational Certificate, Type B, Occupational Certificate, Type B (Practical Subjects), or programs for the Intermediate and Specialist Certificates in Industrial Arts, shall be determined by the sessional records of the respective programs. (See Sections 80, 81, 93 and 94.)

The sessional records in each program represent oral and written exercises, practical work, research reports, frequent tests, and the results of term and final examinations.

The standing of candidates will be determined by the combined results of term work and of the final examinations in the subjects of Parts I, II and IV, by the examination results of Part V, and by the record of Observation and Practice Teaching in Part III.

Standing in the subjects of Parts I, II and IV will be issued as follows: A 80+, B 70–79, C 60–69, D 50–59, F below 50.

A student who obtains 50 per cent of the marks in each of the courses in Parts I, II, and IV and 50 per cent of the marks assigned for Part III and for Part V, if applicable, may be recommended by The Council of The College for the Interim Vocational Certificate, Type B, or the Interim Occupational Certificate, Type B (Practical Subjects) or the Interim Intermediate or Specialist Industrial Arts Certificates. Candidates who complete the program under Section 73 may be recommended also for the Bachelor of Education Degree by The Council of The College.

A student who passes in Part III and fails in not more than two of the courses included in Parts I, II and IV, may be exempted from further attendance, but will be required to take supplemental examinations in the courses failed.

A candidate who fails in a one-year program listed in The College of Education Calendar may be re-admitted in a subsequent year, with the approval of The Council of The College.

A candidate who withdraws from attendance in any program listed in The College of Education Calendar may apply for re-admission in a subsequent year on petition to The Council of The College.

ormance Test

A candidate for the Intermediate Industrial Arts Certificate or the Specialist Industrial Arts Certificate must pass a performance test before being recommended for a certificate.

97. Technical Proficiency Examinations Vocational and Occupational

A candidate for the Interim Vocational or Occupational Cer Type B, must obtain 50% (grade D) in each of the practi theory portions of the Technical Proficiency Examinations.

98. Supplemental Examinations

A candidate for the Vocational or Occupational Certificat B (Practical Subjects) or the Intermediate or Specialist Ce in Industrial Arts who passes in Part II (Observation and Teaching) and fails with a score not lower than 40% in n than two subjects of Part I and Part II shall be exempte further attendance. He may complete his standing for a ce by re-writing, at an annual examination, the examination(s subject(s) in which he failed. Supplemental examinations held in August. If either or both of the two failing scores ar than 40%, the candidate shall attend one Summer Sessio subject(s) concerned.

It is the responsibility of the student concerned to apply, n than July 1, for permission to write the supplemental exam in which standing is desired.

99. Failure in More than Two Subjects

Candidates who fail in more than two subjects of Part I or or in either division of Part III (Observation and Practice Te shall be required to attend and successfully complete anot sion as follows:

1 Candidates for Vocational and Occupational Certificat attend the January–May session of the One-Year Program Summer Session;

2 Candidates for Industrial Arts Certificates who fail in mo two subjects of Parts I or II or in either division of Part attend the January to May session of the One-Year Program

3 Candidates for the Vocational or Occupational (Practic jects) Certificates, Type A, who fail in two or more subjects required to repeat the session concerned.

100. Failure in the Technical Proficiency Examinations

A candidate who attends the Initial summer program will both the practical and theory portions of the Technical Pro Examinations in August, 1971. A candidate who obtains a s below 50% will attempt a supplemental examination in May Candidates who fail to obtain 50% in the supplemental exam will be excluded from further professional training.

A candidate who attends the regular One-Year Program tempt the theory examination in Technical Proficiency in J 1972. Supplementals in this subject will be offered in May,

101. Submission of Assignments

Final marks in any subject or for any Vocational, Occupati Industrial Arts Certificate may not be issued until all assig have been completed satisfactorily.

NOTE: As the value of *an endowed scholarship or prize* is dependent on the actual income of the fund, it is possible that the value of certain scholarships and prizes at the time of payment may be less than the amount stated in the Calendar.

lowships

The Province of Ontario Teacher Education Award in the amount of $500 is available to full-time students in the High School Assistants' and Technical and Industrial Arts Departments who are candidates for Department of Education certificates. No application for the award is necessary.

Ontario Awards /Canada ans Plan

Ontario Student Awards Program/Canada Student Loans Plan

This Plan, originally instituted by the Federal Government in 1964 as a loan scheme, was later combined with provincial grants to provide assistance to supplement the resources of a student and/or the parents where, in the absence of such aid, a student would be unable to pursue a post-secondary education. A student may apply for assistance under this Program for only the funds needed, over and above those from his own resources and/or those of his family, to enable him to continue his studies. The institution to which application is made will inform the student of the amount of aid granted in each case. Part of the assistance granted will be in loan form under The Canada Student Loans Plan. Borrowers under this Plan are required to repay principal and to pay interest, but no payments are required so long as the student is in full-time attendance at an eligible institution and for six months thereafter. Interest charges during this period are paid by the Federal Government who also guarantees the loan principal. After the interest-free period, repayment of principal and simple interest charges on the outstanding balance are required in regular monthly payments to the bank from the borrower. The maximum amount which may be advanced under this Plan to one student is $1,000 in one academic year. The maximum total indebtedness allowed under this Plan is $5,000.

Application should be made in the first instance to the Registrar, The College of Education. If assistance is approved, the institution will first issue a Certificate of Eligibility for the loan portion which

authorizes the student to make arrangements for the loan w branch of any chartered bank in Canada. The grant portio award is normally paid in the second term.

104. The William Pakenham Fellowship in Education

The late Dr. William Pakenham bequeathed to the Unive Toronto the residue of his estate to be used as the governi of the University may direct on behalf of the activities College of Education.

Accordingly, a Fellowship in Education has been establis advanced work either in the University of Toronto or in son university approved by the Senate. The Fellowship shall be a at such intervals and have such value (usually $2,000) as th on the recommendation of The Council of The College of tion may from time to time determine.

Applicants must be residents of Ontario, holding a Ba degree and a teacher's certificate valid in a Canadian provi must submit a record of professional experience and evid ability to make a contribution to education in Canada as of further work.

An application form may be obtained from the Registr College of Education. Completed applications must be rece March 15.

105. The Pakenham Memorial Prize

As a memorial to Dr. William Pakenham, Dean of The Co Education from 1907 to 1934, the teachers of Ontario have an annual Memorial Prize of the value of the interest on The Prize will be in the form of books stamped with the Arms of the University of Toronto, and will be awarded student who obtains the highest standing, as reported in the returns of The College, in the subjects of Part I of the High Assistants' Program, Type B, and in Practice Teaching.

106. The Hugh W. Bryan Memorial Prize of The Ontario Secondary School Teachers' Federation

The Ontario Secondary School Teachers' Federation has an annual scholarship of the value of $100 in memory of a President of the Federation, Dr. Hugh W. Bryan. The prize awarded by the Scholarship Committee of the Federation close of each session and after receipt of a report from The of The College of Education, to the student in regular att throughout the session in the High School Assistants' Progr has shown 'the most outstanding qualities of scholarship, ability, and character.'

107. The Polymer Corporation Scholarship in Science and/or Mathematics

The Polymer Corporation Limited of Sarnia, Ontario, ha lished a scholarship of $750 to increase the supply of qualified to teach Science or Mathematics in secondary The applicant must be a resident of the Province of Onta has graduated in the past five years with a degree in Arts or

from a Canadian university. The applicant must have Canadian citizenship or have declared intent to obtain this.
Candidates must be prepared to teach Mathematics and/or Science in a secondary school in Canada upon completion of the 1971–72 regular session of The College of Education, University of Toronto.
Application forms are available from the Registrar, The College of Education, 371 Bloor Street West, Toronto 181, or from the Secretary, Scholarship Committee, Polymer Corporation Limited, Sarnia, Ontario. Completed applications must be received not later than May 15, by the Secretary, Scholarship Committee, Polymer Corporation Limited .

108. The ederation ssociation larship in matics or thematics d Physics

The Confederation Life Association has established a scholarship of $500 to attract honour graduates in Mathematics or in Mathematics and Physics into the teaching profession. The applicant must be a graduate of a Canadian university and must agree to attend the 1971–72 session of The College of Education, University of Toronto, to qualify for a Type A Certificate in Mathematics or Mathematics and Physics.
Application forms are available from the Registrar, The College of Education, 371 Bloor Street West, Toronto 181, or from the Head of the Department of Mathematics or Physics at the student's university.
The completed application forms must be received by the Registrar, The College of Education, University of Toronto, not later than May 15.

University of Toronto Degree Programs of Interest to Teachers

Graduate s, Ontario stitute for Studies in Education

Programs of Study leading to University of Toronto graduate degrees of Master of Education, Master of Arts, Master of Philosophy, Doctor of Education and Doctor of Philosophy are available through the Ontario Institute for Studies in Education. Enquiries should be addressed to the Director of Graduate Studies, Ontario Institute for Studies in Education, 252 Bloor Street West, Toronto 181.

High School ants' Type B ner Program eachers with Professional Education

A summer program leading to the High School Assistant's Certificate, Type B, will be held from July 5 to August 13, 1971. Applications must be submitted not later than June 1, 1971. Examinations will take place during the last week of the course.

This course is open to a candidate who holds a university degree approved for admission to the High School Assistants' Program, Type B, and

i who, after failing in a Completing Course or a One-Year Program of a College of Education, has been given permission by The Council of The College to attend this course with a change of options,

OR

ii who holds an Interim Ontario Elementary School Teacher's Certificate, Standard 4,

OR

iii who holds a Permanent Elementary School Teacher's Certificate, Standard 4, and who does not have a contract with a secondary school board,

OR

iv who holds an acceptable teaching certificate other than (ii) or (iii) above,

OR

v who is eligible for a secondary school Letter of Standing but who wishes to familiarize himself with the Ontario school system.

A candidate who fails in more than two subjects shall re-attend a Summer Session for Teachers with Professional Education another year.

A candidate who fails in not more than two subjects of the program (of which only one may be a course in the principles and procedures of teaching) may qualify for the Type B Certificate under conditions outlined in Section 30.

Candidates are required to submit evidence of a negative tuberculin test reading or chest x-ray taken within the year preceding July 5, 1971. The program will consist of course offerings of the Departments of Administration and Program Development, Educational Psychology, and History, Philosophy, Sociology of Education, and an appropriate pattern of two secondary school subjects chosen

from the following: English, Geography, History, Latin, Fr German, Spanish*, Mathematics, Science, Home Economics, Ph and Health Education, Theatre Arts.

*If sufficient numbers apply.

NOTES:

1 If a sufficient number of teachers apply, a special course w offered in The College of Education with Business Educati two subjects or options, i.e. Typewriting *and* either Account Marketing or Secretarial Science. For further information p write to Professor A. P. Seggie, The College of Education, Bloor Street West, Toronto 181.

2 Home Economics may be chosen as an option by candidates submit evidence of graduation with a standing not lower than or III Class Standing, whichever is higher, in the final year of a versity program having at least five approved courses in Home nomics. This option leads to the Intermediate Certificate in H Economics.

3 Candidates holding two university courses in Physical and H Education who have successfully completed the High Schoo sistants' Type B Physical and Health Education option wi granted Part I of the Intermediate Certificate in Physical and H Education. All candidates will be required to pass a motor perf ance test at the beginning of the course.

4 The Theatre Arts course counts as credit towards the Th Arts Certificate, which may be obtained after successful compl of a further summer session.

111. High School Assistants' Type A Seminars

A special Summer Session of six weeks, beginning on July 5, will be offered to provide the opportunity for teachers who h High School Assistant's Certificate, and who possess the nece academic qualifications, prescribed in Department of Educ Circular 649, to obtain an Interim High School Assistant's Ce cate, Type A. On July 1, 1969, Type A agreements betwee Department of Education and the universities terminated. C dates for Type A courses will be admitted on the basis of transc evaluated by the Committee on Advanced Standing in accord with the provisions of Department of Education Circular 64 should be observed that this change in procedure will not a students who enrolled in Ontario universities in September 1 it will affect those who enrolled in or after September 1966.

Professional courses leading to the Type A Certificate in one o following special fields of scholarship will be offered:

Biology	English
Chemistry	English and French
Classics	English and German
Economics	English and Latin

English and Spanish
English and History
French
French and German
French and Italian
French and Spanish
Geography
*Geology
*Geography and Geology
History
Home Economics
Italian and Latin
Latin
Latin and French
Latin and Greek
Latin and Spanish
Mathematics
Mathematics and Physics
Music
Physical and Health Education
Physics
Political Science
Political Science and Economics
*Psychology
*Psychology and Sociology
*Sociology
Science

*If sufficient numbers apply.

Applicants must be recommended in their special fields of scholarship and teaching by the Department of Education on the basis of their competence as classroom teachers of their Type A subject(s) in an Ontario secondary school. If it should prove necessary, an equitable limitation of the enrolment may be made. Preference will be given to teachers holding the Permanent High School Assistant's Certificate. Applications will be considered in the order in which they are received. Applications for enrolment must be made to the Registrar, The College of Education, by April 1, 1971.

Counsellor Education

The following courses leading to the Specialist Certificate in Guidance will be offered by the Counsellor Education Department, July 5 to August 6, 1971:

Part I. Admission requirement: an Ontario elementary or secondary school certificate, and evidence of at least one year of successful teaching experience in Ontario.

Part II. Admission requirement: completion of Part I, or an Elementary Guidance certificate, or acceptable background.

Part III. Admission requirement: completion of Part II, or an Intermediate Guidance certificate, or acceptable background.

Part IV. Admission requirement: completion of Part III, or the Specialist summer course, or acceptable background.

Further information and application forms may be obtained from The Director, Counsellor Education Department, The College of Education, 371 Bloor Street West, Toronto 181.

113. Home Economics ɛr Sessions

Parts II and III of the revised program and Part IV of the former program of the summer courses leading to the Intermediate Certificate in Home Economics will be given in 1971:
Parts II and III (revised program) July 5 to August 20
Part IV (former program) July 5 to August 13

Admission Requirements:

1971 only — Part II – Elementary Home Economics Certifi based on completion of Part I, rev program

1971 and 1972 — Part III – Successful completion of Part II, rev program

1971 only — Part IV – Successful completion of Part III, for program

The summer courses leading to the Intermediate Certificate Home Economics are being discontinued, and only candidates meet the admission requirements above can be admitted to Pa and Part IV in 1971 only and to Part III in 1971 and 1972.

Teachers who wish to qualify to teach Home Economics and not enter the courses being given in 1971 and 1972 may take approved full university courses in Home Economics followed one summer seminar at The College of Education, University Toronto.

Applications for Parts II, III and IV must be submitted not l than May 1, to the Chairman, Home Economics Summer Cou The College of Education, 371 Bloor Street West, Toronto Ontario. A late fee of $20.00 will be assessed applicants acce between May 1 and June 1. No application will be accepted a June 1.

Intermediate Program for Graduates with university credits Home Economics. This seminar will not be offered in 1971.

114. Physical and Health Education Summer Sessions

Separate Summer Sessions in Physical and Health Education wil offered in Toronto for men and women.

Intermediate Summer Sessions (Secondary School Teachers)

The program leading to an Intermediate Certificate in Physical Health Education consists of two Summer Sessions (Intermedi Parts I and II). These will be held from July 5 to August 13, 19 Applicants for admission to the Summer Sessions must hold a H School Assistant's Certificate.

Applicants holding an Elementary Physical and Health Educa Certificate granted under former regulations may be admitted to second Summer Session (Intermediate, Part II).

Specialist Summer Session (Secondary School Teachers)

The Summer Session leading to the Specialist Certificate will held in Toronto from July 5 to August 13, 1971.

Applicants for admission must hold an Interim High School As ant's Certificate or a Permanent High School Assistant's Certifi and an Intermediate Certificate in Physical and Health Educati and have taught for a period of at least one year in a second school in Ontario, or in Grade 9 or 10 of an elementary schoo a separate school in Ontario, or hold a High School Assista

Certificate and a Supervisor's Certificate in Physical and Health Education. *In addition to the above, as of July 1, 1972, five university courses in Physical and Health Education, beyond a first university degree, will be required for admission to the Specialist Course in the summer session.*

Applications

Application forms may be obtained from the Head of Women's Physical and Health Education, or from the Head of Men's Physical and Health Education, The College of Education, 371 Bloor Street West, Toronto 181. Completed application forms must be returned not later than May 1, 1971.

Physical and Health Education Summer Courses for Elementary School Teachers

The following courses leading to the appropriate Department of Education certificates will be offered by the Physical and Health Education Departments (Men and Women), July 5 to August 6, 1971:

1 *Elementary, Type B.* Admission requirement: a certificate or Letter of Standing qualifying the applicant to teach in an elementary school in Ontario.

2 *Intermediate, Type B, Part I.* Admission requirement: completion of the Elementary, Type B course or its equivalent.

3 *Intermediate, Type B, Part II.* Admission requirement: completion of Part I of the Intermediate, Type B course.

4 *Supervisor's Course.* Admission requirement: an Intermediate Certificate in Physical and Health Education, Type B, and at least five years' approved teaching experience.

Further information and application forms may be obtained from the Chairman, Physical and Health Education Department, The College of Education, 371 Bloor Street West, Toronto 181.

Medical Certificates

Each applicant is required to forward by June 15 a medical certificate from his own physician indicating that he is physically fit to take a Summer Session in Physical and Health Education. Applications will not be given final acceptance until this condition has been fulfilled.

15. School rarianship Sessions

There are three six-week Summer Sessions leading to the Specialist Certificate in School Librarianship. The Intermediate Summer Session, Parts I and II, lead to the Intermediate Certificate in School Librarianship. The third Summer Session leads to the Specialist Certificate in School Librarianship. The three sessions, which must be taken consecutively, are offered to meet the greatest need, hence all three are not offered every summer, nor consecutively.

The Specialist Program will be offered in Toronto from July 5 to August 13, 1971. Application forms may be obtained from the

Chairman, School Librarianship Department, The College of cation, 371 Bloor Street West, Toronto 181. Application forms be submitted not later than May 1, 1971.

Specialist Summer Session:

This summer program will continue the training offered in Intermediate Program. It will include the following: contempo adult fiction for young people; recreational reading for the relu reader, School Media Centre program and administration, recreat reading for Grades 7–9, planning School Media Centre qua audio-visual materials, curriculum-related materials in a sel subject area.

Applicants for admission to the Specialist Program must:

1 hold a Permanent High School Assistant's Certificate;

2 submit evidence, certified by the principal of the school cerned, of at least one year of successful secondary school lil experience during a minimum of 15 periods per week, subsec to completion of the Intermediate Program, Part II.

A candidate who successfully completes this Program will be ommended for the Specialist Certificate in School Librarianshi

116. Business Education Summer Sessions

Teachers who wish to enrol in any of the following Summer sions should write for application forms to the Director, Bus Education Department, The College of Education, 371 Bloor S West, Toronto 181, and should submit the completed form not than June 1, 1971.

Summer Sessions leading to Part I, Part II and Specialist in Acc ancy, Data Processing, Marketing, or Secretarial will be he Central High School of Commerce, Toronto, for candidates hold a High School Assistant's Certificate. Candidates with mentary School Teaching Certificates may also attend the I mediate courses.

117. Examinations and Supplementals

Examination Centres:

a Examinations in the non-machine subjects will be held o last Saturday in April at The College of Education and, if suff candidates apply, at Thunder Bay, Sault Ste. Marie, North Ottawa and Windsor only.

b Examinations in the machine subjects will be held on the Saturday in May at The College of Education and, if sufficient didates apply, at Thunder Bay, Sault Ste. Marie, North Bay, O and Windsor only.

Permission to write will be based on the requirements listed b Requests to write the examinations should be made to the Dire Business Education Department, before March 1, in the ye writing. The timetable of examinations will be mailed to a cand when his application is accepted.

Supplementals

A candidate who has failed to obtain standing in the Principles and Practices of Teaching a Business Education subject at a previous session may try the supplemental at the end of the Summer Session.

Requirements for writing examinations:

A candidate may write an examination when

a Intermediate Part I or II college correspondence courses have been successfully completed;

OR

b Intermediate Part I or II subjects have been taught by the candidate for two years within the last three years as certified by the Principal;

OR

c Official evidence is presented of the successful completion of Intermediate Part I or II subjects at a night school course, secondary school option course, a business college course, or an approved machine company course.

wo-Summer am Leading ommercial- Vocational ate, Type B

Commercial-Vocational Courses of a two-summer sequence will be offered at Toronto in 1971, commencing July 5 and ending August 6. These courses lead to the Interim Commercial-Vocational Certificate, Type B. This certificate is valid in any secondary school for teaching only the commercial subjects named on the certificate.

To these five-week courses may be admitted the following:

1 Graduates of an accredited university with standing acceptable to The College of Education who are not eligible for the High School Assistants' Program. These candidates may qualify for admission to any one of the courses offered.

2 Graduates of a three-year Secretarial Science Diploma Course at an educational institution whose program is acceptable to The College of Education in content and standards. These candidates may qualify for admission to the Typewriting, Office Practice and Shorthand courses.

Applicants must submit evidence that they have obtained a contract with a secondary school board, or a contract with an inspected private school, to teach the business subjects for which they are certified.

Applicants proceeding toward a Commercial-Vocational Certificate, Type B, may choose one of the following courses:

1 Typewriting and Office Practice

2 Typewriting, Office Practice and Shorthand

The course followed determines the skills or subjects for which the certificate is valid in a secondary school.

Subjects of Certification

Applicants who select the Typewriting and Office Practice course will be certified to teach Typewriting, Grades 9 and 10, and Office

Practice. These teachers may also be certified for other re
subjects. Teachers who select the Typewriting, Office Practice
Shorthand courses will be certified to teach these three sul
and may also be certified to teach related subjects. Applicant
any of these courses may be required to try qualifying examina
in the field of their choice at the option of the Admissions
mittee. All applications for these courses must be received not
than June 1.

Applicants who are accepted for these courses and who, afte
year's successful teaching, complete a second summer cour
1972, will be granted an Interim Commercial-Vocational C
cate, Type B (subjects named), valid for five years. A perma
Commercial-Vocational Certificate (subjects named) may be i
after two years of teaching experience if the quality of the teac
work has been satisfactory and he has completed half of the c
toward an acceptable university degree. Upon completion o
degree, teachers may apply to the Department of Education f
Interim High School Assistant's Certificate, Type B, and may
ceed towards Commercial Specialist status.

Detailed information regarding this course as well as inform
regarding examinations, should be obtained immediately fron
Director, Business Education Department, The College of E
tion, 371 Bloor Street West, Toronto 181, in order that eligi
for admission may be established before a contract is made w
school board.

119. Three-Summer Program Leading to the Commercial-Vocational Certificate, Type B

Commercial-Vocational Courses of a three-summer sequence w
offered at Toronto in 1971 commencing July 5 and ending A
6. These courses lead to an Interim Commercial-Vocational
ficate, Type B, which is valid in any secondary school for tea
the Commercial subjects named on the certificate. These co
offer preparation in methodology for the subjects of Typewr
Office Practice, Shorthand, and Marketing. The second and
summers of this program will be offered for those who com
successfully the work of the previous summer courses.

To these courses may be admitted applicants who submit the fo
ing:

a an Ontario Secondary School Honour Graduation Diplom
equivalent, and

b a statement satisfactory to The College of Education, fro
employer or employers that the applicant has had at least five
acceptable office or merchandising experience. Graduates o
Marketing Management or Retail Administration options o
three-year course at the Ryerson Polytechnical Institute must su
similar statements testifying to at least two years of acceptable
chandising experience subsequent to graduation from the Ry
Polytechnical Institute, and

c evidence that an applicant has passed the required qualifying examinations in Shorthand, Typewriting, or Marketing, and
d evidence that an applicant has obtained a contract with a secondary school board, or a contract with an inspected private school, to teach the business subjects in which he has passed the qualifying examinations.

Applicants proceeding toward a Commercial-Vocational Certificate, Type B, may choose one of the following courses:

1 Typewriting and Office Practice
2 Typewriting, Office Practice and Pitman Shorthand
3 Marketing

The course followed determines the skills or subjects for which the certificate is valid in a secondary school.

Subjects of Certification

1 Applicants who select the Typewriting and Office Practice course will be certified to teach Typewriting, Grades 9 and 10, and Office Practice. These teachers may also be certified for other related subjects. Teachers who select the Typewriting, Office Practice, and Shorthand courses will be certified to teach these three subjects and may also be certified to teach related subjects.

2 Applicants who select the Marketing course will be certified to teach Retail Merchandising, Grades 9 and 10, and Marketing, Grades 11 and 12, and may be certified to teach related subjects in the marketing field.

Examination Regulations

Qualifying examinations will be offered at The College of Education, Toronto, in April and May. Prior arrangements for writing examinations must be made through The College of Education. Special arrangements may be made prior to May 15, to write examinations in designated examination centres outside Toronto. No qualifying examinations will be offered after May 31, 1971.

If the applicant is successful in the summer courses and in teaching, the employing board will not be required to advertise the position during the teacher's second year of teaching. After the third summer course the successful candidate will receive an Interim Commercial-Vocational Certificate, Type B (subjects named). This certificate will be valid for five years. A permanent Commercial-Vocational Certificate (subjects named) may be issued after two years of experience if the quality of the teacher's work has been satisfactory and the teacher has completed half the credits toward an acceptable university degree. Upon award of this degree, the teacher may apply to the Department of Education for an Interim High School Assistant's Certificate, Type B, and will be eligible to proceed toward Commercial Specialist status.

Detailed information regarding this course as well as information regarding examinations should be obtained immediately from the Director, Business Education Department, The College of Educa-

tion, 371 Bloor Street West, Toronto 181, in order that eligi for admission may be established before a contract is made w school board.

120. Vocational and Occupational Summer Sessions

Vocational, Type B, Summer Sessions

A Summer Session leading to the Interim Vocational Certif Type B, will be offered from July 5 to August 20, 1971 for ho of High School Assistant's Certificates who meet Departme Education requirements for Vocational certification.

Vocational and Occupational Type B (Practical Subjects), Su Session

The Initial seven-week Summer Session leading to the Interim tional and Occupational Certificates will be offered for the last from July 5 to August 20, 1971. Technical Proficiency Exa tions will be taken in August 1971 by those candidates who q for this program.

A contract with a board of education to teach during the s year 1971–72 is required in addition to the admission require for the One-Year Program (see Sections 79–86). The Comp Session will be offered July 5 to August 20, 1971, for those qualify.

Vocational, Type A, Summer Sessions

Summer Sessions leading to the Vocational Certificate, Type A be held from July 5 to August 6, 1971. Parts I and II will be o by The College of Education.

Occupational, Type A (Practical Subjects), Summer Sessions

Summer Sessions leading to the Occupational Certificate, Ty will be held from July 5 to August 6, 1971. Parts I and II w offered by The College of Education.

NOTES:

Applications must be received not later than June 1, 1971, fo Vocational or Occupational Summer Session mentioned a Application should be made to the Director, Technical and Indu Arts Department, The College of Education, 371 Bloor Street Toronto 181.

121. Industrial Arts Summer Sessions

Program for the Elementary Certificate

A revised program of two seven-week courses will replac former program of three five-week courses. Parts I and II w offered from July 5 to August 20, 1971.

Part III of the former five-week program will be offered in from July 5 to August 6.

To Part I may be admitted a teacher who holds a certificate Letter of Standing qualifying him to teach in an elementa secondary school in Ontario.

To Part II may be admitted a candidate who has successfully completed Part I, and to Part III may be admitted a candidate who has successfully completed Part II of the Elementary program.
Candidates will be able to complete the requirements for this certificate according to the following schedule:

Year	*Former Program*	*Revised Program*
1971	Part III	Parts I and II
1972		Parts I and II

Program for the Interim Supervisor's Certificate

This program has been discontinued.

Program for the Interim Intermediate Certificate

Part II will not be offered in 1971.
Parts I and III will be offered from July 5 to August 6, 1971.
To Part I may be admitted a teacher who has successfully completed Parts I and II of the Elementary Industrial Arts Summer Program and Part I of the Industrial Arts Supervisor's Summer Program, or has successfully completed Parts I, II and III of the Elementary Industrial Arts Summer Program.
To Part III may be admitted a candidate who has successfully completed Part II of the Intermediate Program.

NOTE:

Part I is being offered in 1971 for the last time, and providing sufficient candidates apply.
Candidates will be able to complete requirements for the Interim Intermediate Industrial Arts Certificate through the summer program according to the following schedule:

Year	*Courses Offered*
1971	Parts I and III
1972	Part II
1973	Part III

Program for the Interim Specialist Certificate

Parts I, II and III of the three-summer sequence will be offered from July 5 to August 6, 1971.
To Part I may be admitted a candidate who:
a holds an Interim Intermediate Industrial Arts Certificate. (Beginning in 1972, an average of B standing in the Intermediate Industrial Arts Program will be required.), and
b has taught Industrial Arts successfully for one year subsequent to obtaining the Intermediate Certificate as confirmed by the Area or Municipal Director or Superintendent concerned, and
c has seven Grade 13 credits (two of which shall be English or français) or equivalent as approved by The College of Education.
To Part II may be admitted a candidate who has passed Part I.
To Part III may be admitted a candidate who has passed Part II.

Further information, and application forms may be obtained fr
The Director, Technical and Industrial Arts Department,
College of Education, 371 Bloor Street West, Toronto 181, Onta

122. Occupational Trades Summer Sessions

If a sufficient number of candidates apply, a six-week progr
commencing July 5, and ending August 13 (two weeks for e
subject) leading to the Interim Occupational Certificate, Typ
(Practical Subjects) will be offered in Toronto only, in the follow
subjects:
Care of the Sick and Family Care, Custodial Services, Electr
Appliance Repair, Food Preparation and Hygiene, Painting
Decorating, Personal Grooming, Retail Sales, Rough Carpen
Service Station Operation, Sewing and Alterations, Small Engi
Trowel Trades, Waiter and Waitress Training, and Welding.
To this program* may be admitted candidates who meet the gen
admission requirements, and in addition:
i hold an Interim or Permanent Elementary School Teacher's
tificate and have 3 years of related industrial experience, or
ii hold an Interim or Permanent Elementary School Certificate
an Intermediate Home Economics Certificate, or
iii hold an Interim or Permanent Elementary School Teach
Certificate and an Intermediate Industrial Arts Certificate, or
iv hold an Interim Vocational Certificate, Type B, or
v have standing in all professional courses leading to an Inte
Vocational Certificate, Type B, and not less than 40 % average
the Technical Proficiency Examinations and have had appro
practical experience in three occupational or service trade areas,
vi have a contract to teach Occupational (Practical Subjects)
the 1971–72 school year.
Before candidates for the above-mentioned program may be
ommended for certification they:
i will be required to pass three Technical Proficiency Examinati
following the final summer program, and
ii will submit acceptable Subject Analyses, Courses of Study, S
Plans, and Equipment Lists.
NOTE: Candidates who do not have the necessary work experie
will be required to take a second six-week program of pract
subjects.

*This is normally a two-summer program.
To Part II may be admitted candidates who have completed Pa

123. Attendance at Summer Sessions

Owing to the compact nature of the Summer Sessions, absentee
cannot be tolerated except for reasons of health and then only
a maximum of five days supported by a medical doctor's statem
This regulation applies to all candidates attending all Sum
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The University of Toronto issues the following calendars and other publications detailing courses of instruction given by the University. Requests for calendars or information may be directed to the Office of Admissions of the University or to the Secretary of the particular Faculty, School or Institute.

Admission Information	Admission Awards Undergraduate Admission Handbook Undergraduate Admission Bulletin
Science and Engineering	Faculty of Applied Science and Engineering Engineering at Toronto – descriptive brochure
Architecture	Faculty of Architecture, Urban and Regional Planning and Landscape Architecture
and Science	Faculty of Arts and Science St. George Campus Scarborough College Calendar Erindale College Calendar
Business	School of Business – Graduate Program in Business Administration
Child Study	Institute of Child Study
Dentistry	Faculty of Dentistry Division of Postgraduate Dental Education Division of Dental Hygiene
Education	The College of Education Graduate Degrees in Education*
Extension	Degree Programmes in Extension Diploma and Certificate Programmes in Extension Continuing Education Programme in Extension
od Sciences	Faculty of Food Sciences
Forestry	Faculty of Forestry
ıate Studies	School of Graduate Studies
Hygiene	School of Hygiene
Law	Faculty of Law
ary Science	School of Library Science
Medicine	Faculty of Medicine, Medical Course Division of Rehabilitation Medicine Division of Postgraduate Medical Education
Music	Faculty of Music The Royal Conservatory of Music Year Book Syllabi (Please State Subject)
Nursing	School of Nursing
Pharmacy	Faculty of Pharmacy
and Health Education	School of Physical and Health Education
ocial Work	School of Social Work

*Write to: Ontario Institute for Studies in Education, 252 Bloor Street West, Toronto 181, Ontario.

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University of Toronto
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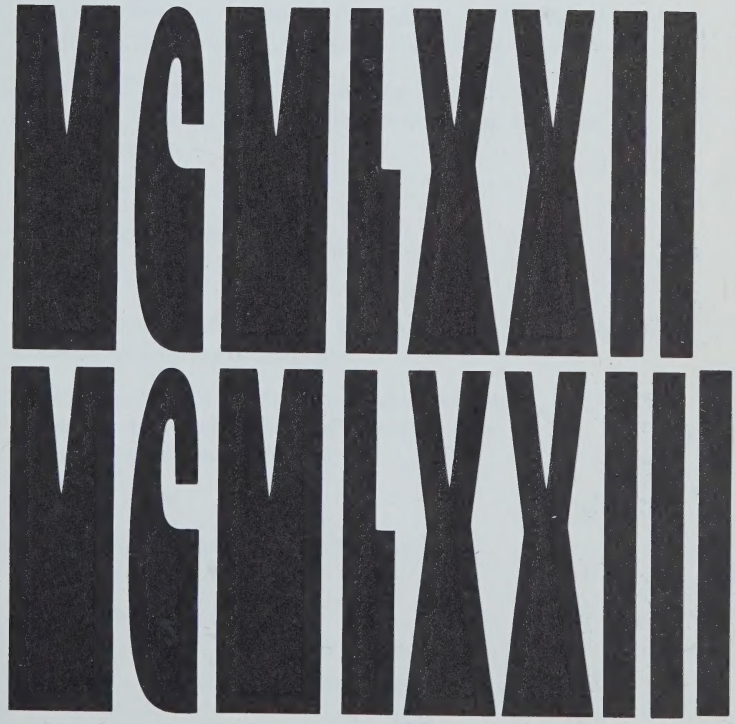

In view of increasing costs of supplies and labour, fees, residen
dues and other charges set forth in this Calendar are subject
changes by the Board of Governors.

Enquiries concerning courses at The College of Education shou
be addressed to the Registrar, The College of Educati
371 Bloor Street West, Toronto 181.

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Historical Note

When secondary education in Upper Canada was officially introdu in 1807, qualifications for teachers were ill-defined and professio training was non-existent. Nevertheless, a surprising number 'educated gentlemen' found their way into the classrooms of District Grammar Schools. Unfortunately, the supply of th superior pedagogues failed to keep pace with the growth of population and the subsequent increase in schools. But in spite the difficulties encountered, no serious attempt to provide teac training was made for more than half a century.

Beginning in 1858, a number of experiments involving m schools and training institutes was conducted with the aim improving the academic and professional qualifications of teach None of these endeavours met with any widespread satisfaction.

In 1890, all such operations were abandoned with the founding a provincial School of Pedagogy in Toronto. Seven years later, institution was moved to Hamilton and renamed the Ont Normal College.

In 1906, the training of secondary school teachers was modi drastically when Faculties of Education were organized at University of Toronto and at Queen's University. In Toronto, Faculty offered professional secondary school courses in Pedag In order to improve the practical and experimental aspects of program, the Faculty established, in 1910, a practice school, University of Toronto Schools.

This pattern of teacher training continued until after the close World War I. In 1920, it came to an abrupt end when the Fac of Education at Queen's was discontinued and the Faculty at Toro was designated as the Ontario College of Education, University Toronto.

During the period since its inception, the Ontario College of E cation has expanded its program, its services, its facilities, and added a number of important departments: the Guidance Ce

in 1945; the Vocational and Industrial Arts Department, in 1946; the Department of Advanced Academic Recommendation (now known as the Office of Advanced Standing), in 1957; Educational Media Centre, in 1966; the Department of Computer Studies, in 1968; and the Institute of Child Study, in 1971.

In 1966, the Departments of Graduate Studies and Research were transferred to the Ontario Institute for Studies in Education, with the result that the activities of those departments are now administered by the Institute.

In 1966, a new agreement for the operation of the Ontario College of Education was made between the Minister of Education and the University of Toronto, establishing a College Council and Advisory Board. By the same agreement, the name of the College was changed to *The College of Education, University of Toronto.*

During a period of forty-five years The College was the sole institution in the province for the preparation of secondary school teachers. In 1965, the situation altered with the opening of the Althouse College of Education, The University of Western Ontario. Since then Faculties of Education have been established at Queen's University, The University of Ottawa, and Lakehead University.

Today, The College of Education pursues its traditional role of training secondary school teachers and, in addition, trains a number of elementary school teachers. The College also administers the University of Toronto Schools and the Guidance Centre.

Academic Calendar, One-Year Program, 1972-

Sept. 11 to Dec. 20	Autumn Term, 1972
September 11 to 15	Registration Week
September 18	Classes begin
October 2	Last date for changing optional subjects
October 9	Thanksgiving Day
Oct. 23 to Nov. 17	Practice Teaching Series I
November 11	Remembrance Day
December 31	Last day for accepting applications for supplemental teachi practical tests
January 3 to April 6	Winter Term, 1973
January 3	Last day for receiving the second instalment of fees
Jan. 22 to Feb. 16	Practice Teaching Series II
March 12 to 16	Projects Week
March 19 to 23	Mid-term break
Mar. 26 to April 6	Practice Teaching Series III
April 20	Good Friday
April 9 to May 11	Spring Term, 1973
April 30 to May 11	Final Examinations
May 25	Start of University Commencement
June 23	Last day for accepting applications for supplemental written examinations

Academic Calendar, Summer Session, 1972

August 4	Business Education Summer Sessions for Intermediate Accountancy, Data Processing, Marketing, and Secretarial, Parts I, II and Specialist
August 4	Commercial-Vocational Five-Week Summer Session (C2)
August 4	Commercial-Vocational Completing Session (C2)
August 4	Commercial-Vocational Teachers, Second and Third Summer Sessions (C3)
August 4	Counsellor Education Summer Session, Parts I, II, III, IV
August 11	High School Assistants' Summer Session for Teachers with Professional Education
August 11	High School Assistants' Type A Summer Session
August 18	Home Economics Summer Session, Intermediate, Part III
August 11	Home Economics Summer Session, Intermediate, Seminar
August 18	Industrial Arts Summer Session, Elementary, Parts I and II
August 4	Industrial Arts Summer Session, Intermediate, Part II
August 4	Industrial Arts Summer Session, Specialist, Parts I, II and III
August 18	Occupational, Type B (Practical Subjects), Professional Program Summer Session, Completing
August 11	Occupational, Type B (Practical Subjects), Trades Program Summer Session, Parts I and II
August 4	Occupational, Type A (Practical Subjects), Summer Session, Parts I and II
to July 28	Outdoor Education Course
August 11	Physical and Health Education (Women) Summer Session, Intermediate, Parts I and II
August 11	Physical and Health Education (Women) Summer Session, Specialist
August 11	Physical and Health Education (Men) Summer Session, Intermediate, Parts I and II
August 11	Physical and Health Education (Men) Summer Session, Specialist
August 4	Physical and Health Education for Elementary School Teachers, Summer Session, Elementary, Intermediate Parts I and II, and Supervisor's
August 11	School Librarianship Summer Session, Intermediate, Part I
August 11	Theatre Arts Summer Session, Part II
August 18	Vocational, Type B, Summer Session, Completing
August 18	Vocational, Type B, Summer Session, for holders of High School Assistant's, Type B, Certificates
August 4	Vocational, Type A, Summer Session, Parts I and II
August 4	Vocational, Type A, Special one-summer Program for holders of Applied Science degrees

University Administrative Officers 1971–72

Acting President	J. H. Sword, M.A., LL.D.
Assistant to the President	N. S. C. Dickinson, C.D., B.A.
Acting Executive Vice-President (Academic) and Provost	D. F. Forster, B.A., A.M.
Vice-Provost (Research Administration)	Miss S. Dymond, B.A., Q.C.
Executive Vice-President (Non-Academic)	A. G. Rankin, B.COM., F.C.A.
Executive Assistant to the Executive Vice-President (Non-Academic)	J. F. Brook
Vice-President (Administration)	F. R. Stone, B.COM., F.C.A.
Secretary of the Board of Governors	D. S. Claringbold
Director of Administrative Services	M. A. Malcolm, B.A.
Director of Physical Plant (to December 31, 1971) (from January 1, 1972)	F. J. Hastie, B.SC., P.ENG. J. T. Turner, B.SC., P.ENG.
Vice-President (Health Sciences)	J. D. Hamilton, M.D., F.R.C.P.(C), D.SC.
Vice-President and Registrar, and Secretary of the Senate	R. Ross, M.B.E., M.A.
Assistant Registrar	Miss H. L. Reimer, B.A., B.PED.
Chief Librarian	R. H. Blackburn, M.A., B.L.S., M.S., LL.D.
Acting Director of University Extension	E. M. Gruetzner, B.A.
Assistant Registrar and Director of Admissions	W. Kent, M.A.
Director of Student Awards	P. S. Phillips, B.A., C.A.
Secondary School Liaison Officer	W. A. Hill

rector of Statistics and Records	J. M. Tusiewicz, B.SC.(ENG.), M.A.SC., M.B.A.
Director of University Health Service	G. E. Wodehouse, M.C., M.D., F.R.C.P.(C), M.R.C.P.
Assistant Director of University Health Service – Women	Miss F. H. Stewart, B.A., M.D.
Director of Career Counselling and Placement Centre	D. Currey, B.A.SC.
cting Director of International Student Centre	E. A. McKee, M.A.
Director of Advisory Bureau	D. J. McCulloch, B.A., M.D., D.PSYCH., F.R.C.P.(C)
Director of Housing Service	Mrs. M. G. Jaffary, B.A.
Director of University of Toronto Press	M. Jeanneret, B.A., LL.D.
ctor of University News Bureau	K. S. Edey
Director of Alumni Affairs	J. W. Duncanson, B.A.
Director of Development	R. L. Jones
Warden of Hart House	E. A. Wilkinson, B.A.
Director of Athletics and Recreation – Men	A. D. White, B.A., M.ED.
irector of Physical and Health Education – Women	Miss A. Hewett, B.ED., P.E.

The College of Education Administrative Staff 1972–73

Dean	D. F. Dadson, B.A., B.ED.
Assistant Dean	H. O. Barrett, C.D., B.A., D.PAED., F.O.T.F.
Director of the Department of Technical and Industrial Arts	A. W. Frizzell, B.A.SC., P.ENG.
Director of Practice Teaching	J. W. Dodd, B.A.
Director of the Guidance Centre	C. L. Bedal, B.A., M.ED.
Manager of the Guidance Centre	S. J. Totton, B.A.
Director, Office of Advanced Standing	J. S. Carlisle, B.A., B.PAED.
Principal, University of Toronto Schools	W. B. MacMurray, B.A., B.PAED.
Director of the Institute of Child Study	M. F. Grapko, M.A., PH.D.
Registrar	Miss A. A. L. Elliott, B.A.
Assistant Registrar	G. A. Whyte, B.A., B.J.
Librarian	Miss M. C. Shortt, B.A., M.L.S.
Administrative Assistant and Office Manager	G. Mitchell, B.A.
Nurse	Mrs. Gwendolyn M. Allan, R.N.

The College of Education
Teaching Staff 1972–73

Administration and Program Development

Professor A. S. Nease, M.A., F.C.C.T.
Professor J. W. Greig, B.A., ED.D.
ıte Professor V. K. Gilbert, B.SC., M.ED.
nt Professor R. A. Martin, B.A.SC., M.ED., PH.D.
Lecturer Sister Agnes Sheean, B.A., M.ED.
Lecturer J. D. Wood, M.A., A.R.C.T.

Art Education

sor Emeritus P. H. Taçon, B.PAED., M.A.
ıte Professor J. A. M. Emerson, M.A.
ınt Professor M. J. McCarthy, M.A.

Business Education

Professor A. P. Seggie, B.A.
ıte Professor J. H. Dool, B.A.
ıte Professor G. A. Reid, B.COM., B.ED., M.A., F.C.C.T.
ıte Professor R. B. Wilson, B.COM.
nt Professor B. E. Conchie, B.A.

Classics

Professor B. C. Taylor, M.A.
Lecturer K. E. Prentice, M.A.

Computer Studies

ıte Professor L. J. La Fave, B.ED., M.B.A.
nt Professor D. W. Garth, B.COM.
nt Professor G. D. Milbrandt, B.S.ED.

Counsellor Education

ıte Professor C. L. Bedal, B.A., M.ED.
nt Professor B. R. Eardley, B.S., M.ED.
nt Professor P. A. Manuel, B.A., M.ED.
ɔ Counsellor C. W. M. Pace, B.A., B.S.W.

Educational Media

Professor D. A. Clee, B.A., M.SC., F.R.G.S.

Educational Psychology

Associate Professor R. W. Dent, M.A., PH.D.
Associate Professor C. C. Brodeur, M.A., PH.D.
Associate Professor S. L. Kong, B.A., M.ED., PH.D.
Associate Professor W. V. Trott, M.A.
Assistant Professor D. G. Crawford, M.A., PH.D.
Assistant Professor Mrs. Conchita Tan-Willman, B.S.E., M.A., PH.D.
Assistant Professor R. J. Volpe, M.A., PH.D.
Assistant Professor A. J. Zimmerman, B.A., M.ED.
Lecturer D. S. J. Shackel, M.A.

Elementary Education

Professor G. E. Tait, B.A., B.PAED., ED.D.

English

Professor R. J. McMaster, B.A., B.ED.
Professor J. H. Stevens, M.A.
Associate Professor Mrs. Johan Aitken, M.A.
Associate Professor A. C. Coman, M.A.
Associate Professor J. W. MacDonald, M.A., ED.D.
Associate Professor R. T. Shephard, B.A.
Assistant Professor A. A. Bowers, B.A.
Assistant Professor Miss Joan Laird, B.A.
Assistant Professor K. J. Weber, B.A.

Geography

Associate Professor W. E. Sager, C.D., B.A., F.A.G.S.
Associate Professor R. P. Baine, M.A.
Associate Professor A. Balins, M.A.
Associate Professor Mrs. Una Elliott, M.A., B.ED.

History, Economics, Political Science, Psychology and Sociology

Professor J. C. Ricker, M.A.
Associate Professor R. W. P. Bowles, B.A.
Associate Professor J. E. Cruickshank, M.A.
Associate Professor G. Smith, M.A.
Assistant Professor L. R. Hill, M.A.
Assistant Professor J. D. Thexton, M.A.
Assistant Professor G. A. Whyte, B.A., B.J.
Lecturer D. A. Kearn, B.A., B.ED.

History, Philosophy, Sociology of Education

Professor Emeritus A. F. Skinner, M.A., B.SC., PH.D., F.E.I.S.
Professor J. M. Paton, M.A., D.PAED., F.C.C.T.
Professor G. H. Boyes, M.A.
Associate Professor G. W. Bancroft, B.A., M.ED., PH.D.
Associate Professor D. A. MacIver, M.ED., PH.D.

nt Professor	D. B. Brady, M.A., M.ED.
nt Professor	T. W. Goodenough, M.A.
nt Professor	K. A. McLeod, B.A., M.ED.
nt Professor	L. J. Stott, B.ED.
	Home Economics
te Professor	Hiss Helen Finnegan, B.A., M.S.
nt Professor	Miss Audrey M. Warner, B.A., M.SC.
nt Professor	Miss H. Annette Yeager, B.H.SC., M.ED.
	Mathematics
Professor	W. B. MacLean, M.A.
Professor	K. O. May, M.A., PH.D.
Professor	W. W. Sawyer, M.A.
te Professor	D. L. Mumford, B.A.
nt Professor	D. W. Alexander, B.A., B.ED., M.SC.
nt Professor	F. Ebos, M.SC.
nt Professor	D. L. Fraser, B.SC., B.ED., M.A.
nt Professor	H. L. Ridge, B.SC., M.A.
	Modern Languages
te Professor	R. J. Jones, B.A., MUS.BAC., A.R.C.T.
te Professor	G. A. Kirk, M.A., DIP.D'E.
te Professor	R. R. A. Roy, B.PHIL., M.A.
te Professor	C. R. Theodore, M.A.
nt Professor	H. Hainsworth, M.A.
nt Professor	E. F. James, M.A.
al Lecturers:	
Professor	H. G. Schogt, M.A., PH.D.
te Professor	A. M. Gordon, A.M., PH.D.
te Professor	Mrs. M. Kuitunen, DOTT. IN LETT., M.A., PHIL.M.
te Professor	Mme. M. Léon, L. ÈS L., D.E.S.
Lecturer	Mrs. G. J. Leech, DOC.PHIL.
	Music
nt Professor	Mrs. Natalie Kuzmich, MUS.BAC., M.A.
	Physical and Health Education (Men)
Professor	J. H. Passmore, B.A., B.P.H.E., B.ED.
te Professor	J. R. Life, B.P.H.E., M.ED.
nt Professor	D. F. Fawcett, B.P.H.E., M.A.
nt Professor	R. C. Goode, B.P.H.E., M.A., D.PHIL.
nt Professor	P. B. Robertson, B.P.H.E., B.A., M.ED.
	Physical and Health Education (Women)
te Professor	Miss Jean M. Stirling, B.A., DIP.P.H.E.
nt Professor	Mrs. Janet Armstrong, M.A.
nt Professor	Miss F. June M. Collard, B.P.H.E., B.A., M.SC.

School Librarianship

Associate Professor	Miss Margaret B. Scott, B.A., B.L.S.
Assistant Professor	Miss Fay Blostein, B.A., B.L.S.
Assistant Professor	R. J. Smith, B.A., B.L.S.

Science

Associate Professor	R. G. Casson, B.SC.
Associate Professor	W. A. Andrews, M.SC., B.ED.
Associate Professor	H. M. Lang, B.A.
Assistant Professor	D. I. Galbraith, B.SC.
Assistant Professor	T. J. E. Wolfe, B.S.A.
Lecturer	J. F. Eix, B.SC.

Speech Consultant

Lecturer	Miss Esmé Crampton

Theatre Arts

Associate Professor	J. C. W. Saxton, M.A.
Assistant Professor	A. M. Gifford, M.A.
Lecturer	Mrs. Juliana M. Saxton, B.A.

Technical and Industrial Arts

Professor	A. W. Frizzell, B.A.SC., P.ENG.
Professor	F. E. Mason, B.A.
Associate Professor	E. P. Emerson, B.A., M.ED.
Associate Professor	D. J. Long, B.A.
Associate Professor	T. H. G. Luther, B.ED., M.A.
Associate Professor	W. S. Sloan, B.A., A.O.C.A.
Associate Professor	C. H. Wall, B.ED., M.A.
Associate Professor	R. W. Wilson, B.SC., M.I.E.E.
Assistant Professor	R. G. Burfield, B.A.
Assistant Professor	A. Gaydos, B.A., M.ED.
Assistant Professor	I. T. Malloch, B.A., M.SC.
Assistant Professor	C. Otto, B.A.
Assistant Professor	R. Sramek, B.A.
Assistant Professor	H. J. Taylor, B.A.
Assistant Professor	W. J. Watson, B.A.
Lecturer	P. J. Briggs
Lecturer	J. G. A. Jameson
Supervisor, Technical Proficiency Evaluation	E. Gascoigne, P.ENG.

Staff of The University of Toronto Schools 1972–73

Principal	W. B. MacMurray, B.A., B.PAED.
Assistant Principal	C. D. S. Bate, B.A.SC., M.ED.
Art	D. F. Boutros, B.A.
Classics	E. J. Collins, B.A., B.PAED. H. C. Maynard, M.A. K. E. Prentice, M.A.
English	S. H. Bull, M.A. H. D. Gutteridge, M.A. W. R. H. Montgomery, M.A., PH.D. C. W. Weir, M.A.
History	D. A. Kearn, B.A., B.ED. N. T. McLean, B.A. R. J. Stewart, B.A.
Mathematics	G. A. Fleming, B.A., M.ED. N. D. Fox, B.COM. J. A. Vanstone, B.A.
ern Languages	P. F. L. Gallant, B.A. F. W. Ignatz, B.A. R. J. Moorfield, M.A. W. A. Stickland, B.A.
Music	G. F. FitzGerald
Physical and alth Education	J. L. McElroy, B.P.H.E. W. M. Simons, B.P.H.E., DIP.P.E. (on leave of absence) J. Stulac, B.P.H.E., B.A.
Science	C. E. B. LeGresley, B.A., M.ED. F. M. Speed, B.SC.S., B.ED.
Librarian	T. J. Boucher, B.A., M.S.L.S.
ool Counsellor	C. W. M. Pace, B.A., B.S.W.

Staff of the Institute of Child Study 1972–73

*Academic and Research Division**

Professor and Director	M. F. Grapko, M.A., PH.D.
ociate Professor	J. Fair, B.A., B.P.E., M.ED.
ociate Professor	Mrs. Betty Flint, DIP.C.S., M.A.
istant Professor	A. J. Biemiller, M.SC., PH.D.
istant Professor	Mrs. Dvora Frumhartz, M.A., PH.D.
istant Professor	J. P. Klein, M.A., PH.D.
istant Professor	Mrs. Ada Schermann, M.SC.
istant Professor	R. Volpe, M.A., PH.D.
Lecturer	Mrs. Frances Biemiller, DIP.C.S., M.SC.
Lecturer	Mrs. Elda Bolton, M.A.
Lecturer	Mrs. Jennifer Hardacre, DIP.C.S., M.ED.
Lecturer	Mrs. Margaret L. Kirkpatrick, M.A.

*Part-time members of Staff and Instructors are listed in the Calendar of the Institute of Child Study.

MCMLXXII
MCMLXXIII

General Information

1. Location of The College of Education

The College of Education is located at the corner of Bloor Stre West and Spadina Avenue, in the northwest sector of the S George Campus, University of Toronto. Mailing address of Tl College is 371 Bloor Street West, Toronto 181.

2. Function of The College of Education

The basic function of The College of Education is the training teachers for professional service in elementary and seconda schools, especially in the schools of Ontario. Programs of Tl College provide courses leading to *basic certificates* required f teaching in the high schools, collegiate institutes, vocational schoc and elementary schools of Ontario. Other College courses lead *additional certificates* in areas of subject specialization. The Colle itself does not grant teaching certificates. These are issued by tl Ontario Department of Education on the recommendation of Tl Council of The College. With the exception of skilled tradesme and some others taking Vocational courses, students in The Colle of Education are required to hold acceptable university degrees.

3. College Facilities

The College of Education is equipped with classrooms, lectu rooms, library, laboratories and gymnasia, an educational med centre with a television studio and mobile television unit, langua laboratories, a theatre studio, a computer centre and a typi laboratory.

4. The College Library

Students will find in the Library a major collection of books a periodicals on all aspects of secondary and elementary educatic as well as small working collections on the various subjects tau in Ontario schools. In addition to its loan facilities, the Libra provides a reference service to assist students in locating material educational psychology, school administration, and methods teaching specific subjects.

The Library's selected collection of mounted pictures, filmstri pamphlets, slides, recordings and document kits is available to students for use both in demonstration lessons at The College a in their practice teaching assignments at outside schools. Facili for previewing audiovisual aids are provided in the Library.

Students at The College are entitled to use the main University

Toronto Library, where they can obtain extensive material on subjects other than education.

University Facilities

Students registered for courses in The College of Education may use the University's athletic facilities, and Hart House, under such conditions as obtain with other students. They will also be admitted to the Royal Ontario Museum, 100 Queen's Park, and to the Toronto Art Gallery, Dundas Street, from 9 a.m. to 5 p.m., on presentation of their registration cards.

lth Centre

The Health Centre, in charge of a registered nurse, offers to students first aid, counsel with health problems, and referrals to doctor, dentist, or hospital as appropriate. The Centre is open each week during the session, Monday through Friday, from 8.30 a.m. to 3.30 p.m., Room 115, The College of Education.

University th Service

Any student may consult a staff physician at the Health Service 9 a.m. to 5 p.m., Monday to Friday, and 9 a.m. to 12 noon Saturday, while the University is in session. The University does not accept any responsibility for injuries sustained by students while engaged in Physical Education classes or in University athletic activities, but through the Health Service provides for treatment within the following limits: minor injuries are treated at its offices; treatment for more serious injuries will be provided if such treatment is given under the direction and care of staff retained by the Health Service. Treatment is limited to students who suffer accidents while engaged in and which arise out of University Physical Education classes and athletic activities.

Health Service (Men), 256 Huron Street, 928-2459
Health Service (Women), 256 Huron Street, 928-2456

versity of Advisory Bureau

The Advisory Bureau is prepared to aid in all problems of a personal nature, as well as interpersonal relationships. The staff consists of a psychiatrist, a psychologist, and a group of counsellors. The Advisory Bureau is located at 631 Spadina Avenue (telephone 928-2684).

. Housing Service

The University of Toronto maintains a listing of rooming houses, flats, apartments and homes. Information on these may be obtained through the Housing Service office at 49 St. George Street, Toronto 181.

Off-campus housing of this nature is not subject to University regulation, but every effort is taken to make the information as complete as possible. Students are encouraged to assist in this effort by reporting on the quality of the accommodation they have occupied.

A limited amount of accommodation is offered in exchange for part-time services such as housekeeping or babysitting.

10. St. Andrew's-University Day Nursery

This day nursery, established and supported by the University Toronto, the Graduate Students' Union, and the Students' Admi istrative Council, provides pre-school education and day ca facilities for children of University of Toronto students. Childr aged two to five years are accepted.

The nursery, located at St. Andrew's United Church, 117 Blo Street East, is well equipped and staffed, and is licensed under t Day Nursery Act, Province of Ontario. It operates from 8.30 a.r to 5.30 p.m. throughout the winter academic session. Fees are reaso able, and noon meals and morning and afternoon snacks are pr vided. Information may be obtained from the nursery (telepho 921-7078) or from the School of Graduate Studies.

11. The University of Toronto Schools

The University of Toronto Schools, established in 1910 as a divisi of The College of Education, is a day school for boys from Grad 7 to 13. The normal enrolment is 420 students selected by co petitive examinations from among a large number of applican Each year classes are admitted to Grades 7 and 9 respectively replace the class graduating from Grade 13. The Ontario curriculu leading to university entrance is provided, with opportunities f enrichment, acceleration, independent study, and experimentatio The annual tuition fee is $300.00. The resources of the school a available to staff and students of The College for teaching practic demonstration, and experiment.

12. Guidance Centre

The Guidance Centre aids school guidance workers in obtaini materials such as tests, forms, *The School Guidance Worker*, a some 200 Occupational Information Monographs, and by mai taining a regular mailing service especially designed for the guidan worker.

The main office of the Centre is located at 1000 Yonge Stre Toronto 289 (telephone 928-3211). Office hours are from 8.3 a.m. until 4.45 p.m. daily. The warehouse is at 10 Alcorn Avenu Toronto 190.

13. Institute of Child Study

The Institute is located at 45 Walmer Road. A Course of Studi leading to a Diploma in Child Study is offered (See Section 4 page 50, for description of this program). A laboratory school co sisting of 165 children, ages 3 to 12 years, serves as a teaching a research facility.

14. Tuition and Other Fees

Fees for the High School Assistants' Program and Technical a Industrial Arts Programs of the One-Year Session:

Academic Fee	Men $480	Women $4
Incidental Fees	Men $ 59	Women $
Total Fees (if paid in one instalment)	Men $539	Women $5

First Term Instalment, due September 8*	Men $359	Women $334
Second Term Instalment, due January 3	Men $192	Women $192

*Deduct $50 deposit from first instalment if paid in advance.

NOTES:

1 An applicant who is admitted to The College of Education will be required to pay at least the First Term instalment of fees by September 8, 1972, and before applying to The College Registrar for his registration card.

2 The Academic Fee (which includes the examination and University Library fees) and the Incidental Fees are to be paid to the *University of Toronto* according to instructions on the *Fees Form* obtained from the Registrar.

3 The fee for students attending the Session after Christmas is $240 plus Incidental Fees.

4 Incidental Fees include the following:

For Men — Hart House, Students' Administrative Council, Athletic, and Health Service.

For Women — Students' Administrative Council, Athletic, and Health Service.

5 An additional charge of $12 is made for payment of fees in two instalments.

6 After January 15, an additional deferred payment fee of $15 will be imposed.

7 There is no additional fee for the High School Assistants' Program Type A, or for courses leading to additional certificates when taken concurrently with the High School Assistants' Program, Type B.

8 Admission acceptances must be confirmed, in writing, to the Registrar of The College of Education within fourteen days of the date of acceptance by The College, accompanied by a $50 deposit payable to the *University of Toronto* by certified cheque or money order. The deposit will be applied to the applicant's fee. Forty dollars of the $50 deposit will be refunded if the applicant withdraws his application, in writing, before August 1, 1972.

9 A special fee of $25, payable to the *University of Toronto*, is required of all students who register for *Outdoor Education* 115, to cover the cost of field trips and an Outdoor Education weekend. Cheques will be collected the first day of the course.

10 A special fee of $25, payable to the *University of Toronto*, is required of all students who register for *Culture and Society as it relates to the teaching of French* 129, to cover the travel cost of a field trip to the province of Quebec. Cheques will be collected the first day of the course.

11 A candidate who applies after the last date for application to

any course listed in this Calendar will be assessed a late fee of $
if the candidate is admitted to the course.

12 A candidate who withdraws before the end of his course will
charged fees in proportion to the period of his attendance, i.e.
to the effective date of withdrawal. After twenty weeks no fees w
be refunded.

For Supplemental Examinations:

Fee for each supplemental examination in one subject of any course except High School Assistants', Type A	$
Fee for the supplemental examination(s) for any High School Assistant's Type A Certificate	$

For Summer Sessions:

Summer Session for Teachers with Professional Education	$1
Type A Seminars, Summer Session	$1
Special Student, one subject	$

Business Education Summer Sessions:

Intermediate, Parts I and II, each	$1
Specialist	$1
Commercial-Vocational, each	$1
Commercial Examinations, per subject	$

Counsellor Education Summer Sessions:

Parts I, II, III, and IV, each	$1

Home Economics Summer Sessions:

Intermediate, Part III	$1
Intermediate, Seminar	$1

Industrial Arts Summer Sessions:

Elementary, Parts I and II each	$1
Intermediate, Part II	$1
Specialist, Parts I, II and III, each	$1

Physical and Health Education Summer Sessions:

For Secondary School Teachers

Intermediate Parts I and II (Men and Women), each	$1
Specialist (Men and Women), each	$1

An extra fee will be charged for an Outdoor Education Course, taken in conjunction with a Physical and Health Education Course.

For Elementary School Teachers

Elementary, Intermediate Parts I and II, and Supervisor's, each	$1

School Librarianship Summer Session:

Intermediate, Part I	$1

Theatre Arts Summer Session:	
Second Part of a two-course program	$120
Vocational and Occupational Summer Sessions:	
Type B for holders of H.S.A., Type B, Certificates	$140
Type A, Parts I and II, each	$100
Type A (for Engineers, Architects, Nurses, etc.)	$100
Occupational Trades, Two-week Sessions, each	$ 40
Vocational and Occupational Type B, Part II	$140

Language and Medical Regulations

Facility in English. For a candidate whose first language is other than English a requirement for admission will be the passing of a Communication Test for Teaching in the English Language. The test will be conducted by a Committee composed of representatives of the Ontario Secondary School Teachers' Federation, the Department of English of the University of Toronto, and The Council of The College. Arrangements for the test will be made by the Registrar's Office, The College of Education.

The College is prepared to consider other evidence that may be submitted to the Registrar for evaluation.

Physical Unfitness of Candidates. On the Dean's report to the Minister of Education as to the physical unfitness of a student for training as a teacher, the Minister may require a special medical examination of such student, and, as a result thereof, may direct that he be not eligible for recommendation for a departmental certificate.

6. Student Affairs

The Student Union of The College of Education

The members of the student body of The College of Education are drawn from most of the colleges and universities located across Canada. In addition, many students come from American and European universities.

The Union's functions embrace many facets of life about The College – musical, dramatic, journalistic, social, athletic, and extra-curricular. Of prime importance is the fact that members of the Union are represented on The Council of The College and its Committees.

One-Year Programs Offered In 1972–73

The College will offer the following One-Year Programs leading to Department of Education Certificates, as well as to the Bachelor of Education Degree:

Interim High School Assistants', Type B (See Sections 25–31)
Interim High School Assistants', Type A (See Sections 33, 34, 36)
Art Education (See Sections 38–39)
Business Education (See Sections 35, 36, 38, 39)
Counsellor Education (See Sections 38–39)
Elementary Education (See Sections 38–39)

Home Economics (See Sections 38–39)
Industrial Arts (for High School Assistants) (See Sections 38–39)
Industrial Arts (Intermediate and Specialist) (See Sections 93–98)
Music (See Sections 38–39)
Occupational, Type B (Practical Subjects) (See Sections 77, 79, 8
84)
Occupational, Type A (Practical Subjects) (See Sections 77, 79, 8
Physical and Health Education (See Sections 38–39)
School Librarianship (See Sections 38–39)
Theatre Arts (See Sections 38–39)
Vocational, Type B (See Sections 77–81, 84)
Vocational, Type A (See Sections 77, 78, 81, 83)
Vocational Home Economics (See Section 82)

NOTE:
Details of courses included in the High School Assistants' Progra
and Programs for Additional Certificates are found in Sectio
47–75. Details of courses included in Technical and Industrial A
Programs are found in Sections 86–92, 99, 100.

18. Summary of Secondary School Certificates

Listed below are the teaching certificates required for various pu
poses in the secondary schools of Ontario. All certificates referr
to in this Calendar are Interim, not Permanent.

Certificate	*Subjects Taught by Certificate Holders*
High School Assistant's Certificate, Type B	Academic and General Subjects
High School Assistant's Certificate, Type A	Academic and General Subjects
Vocational Certificate, Type B	The Vocational Subject named on the Certificate
Vocational Certificate, Type A	The Vocational Subject named on the Certificate
Occupational Certificate, Type B (Practical Subjects)	Occupational (Practical Subjects)
Occupational Certificate, Type A (Practical Subjects)	Occupational (Practical Subjects)
Intermediate Industrial Arts Certificate	Industrial Arts Subjects
Specialist Industrial Arts Certificate	Industrial Arts Subjects
Intermediate Certificate in Accountancy, Data Processing, Marketing, or Secretarial	Business Education Subjects

Specialist Certificate in Accountancy, Data Processing, Marketing, or Secretarial	Business Education Subjects
Commercial-Vocational Certificate, Type B (Commercial Subjects named)	Business Education Subjects

NOTE:
1 For *additional certificates*, see Sections 38 and 39.
2 For *Elementary School Teacher's Certificate*, see Section 41.

Interchange of Ontario Teaching Certificates, nentary and Secondary

1 The holder of a Permanent Elementary School Teacher's Certificate, Standard 4, may, upon accepting a contract from a board to teach in a secondary school, be granted an Interim High School Assistant's Certificate, Type B.

2 The holder of a Permanent High School Assistant's Certificate may, upon accepting a contract from a board to teach in an elementary school, be granted an Interim Elementary School Teacher's Certificate, Standard 4.

3 The holder of a Permanent High School Assistant's Certificate, who meets the Department of Education requirements for Vocational Certification, may, upon accepting a contract from a board to teach a Vocational Technical course of a secondary school, be recommended for an Interim Vocational Certificate, Type B, upon successful completion of one seven-week summer session, and after having obtained standing in the Technical Proficiency Examination. Acceptable assignments in Subject Analysis, Course of Study, Shop Plan and Equipment List must also be submitted.

4 The holder of a Permanent Vocational Certificate, a Permanent Occupational Certificate (Practical Subjects) or a Permanent Commercial-Vocational Certificate, who has a university degree acceptable for admission to the Type B course at a College of Education, may, upon accepting a contract from a board to teach in a secondary school, be granted an Interim High School Assistant's Certificate, Type B.

5 It is expected that most transfers referred to in (1) and (2) above will take place in the case of teachers teaching in the general range of Grades 7 to 10. Persons transferring to teach in grades beyond this range are advised to take summer courses which will help them to adjust to the new duties.

ıdorsement of the ligh School Assistant's Certificate, Type B

The holder of a High School Assistant's Certificate, Type B, may have his certificate *endorsed* under the following conditions:

A candidate who has obtained second class standing or better in an approved university course to a total of 15 credits in one secondary school academic subject, or 24 credits (12 credits in each) in two academic subjects, and who completes a year of successful

teaching subsequent to the date of his Type B Certificate in such subject(s) is eligible for endorsement of his Type B Certificate.
The candidate must apply to the *Office of Advanced Standing*, The College of Education, University of Toronto, for approval of his credits and subsequently to the appropriate Area or Municipal Director or Superintendent concerned, for endorsement.

21. Advanced Standing

The Office of Advanced Standing gives rulings on academic standing to candidates who are seeking endorsement of the High School Assistant's Certificate, Type B, or who are applying for admission to a course leading to a High School Assistant's Certificate, Type A. Written enquiries should be addressed to the Director, Office of Advanced Standing, The College of Education, 371 Bloor Street West, Toronto 181.

22. Letter of Standing, Secondary School

A Letter of Standing entitling the holder to teach in an Ontario secondary school for one year will be granted by the Minister of Education to a university graduate from any country who can meet the following conditions:
1 that his university transcripts indicate that the holder has met the academic requirements applicable to Ontario graduates;
2 that his professional training fulfils the requirements of the Ontario Department of Education;
3 that a candidate from outside Canada may be required to meet the Special Committee in the Department of Education;
4 that he is either a Canadian citizen or has Landed Immigrant status, or has applied for Canadian citizenship.
An application for a Letter of Standing must be forwarded to: The Registrar, Ontario Department of Education, Mowat Block, Queen's Park, Toronto 182.
On the statement of the Principal that the candidate has taught successfully for one year under the authority of a Letter of Standing, he may be recommended by the Area or Municipal Director or Superintendent concerned for the Interim High School Assistant's Certificate, Type B.

3. The Bachelor of Education Degree: xtension Programs

The program leading to the Bachelor of Education Degree for graduates of The College of Education who were awarded the High School Assistant's Certificate prior to May, 1970, is described in Section 76A, page 77; the program for holders of Ontario permanent basic teaching certificates is described in Section 76B, page 7

24. Supplemental Examinations, Appeals, and cademic Rights of Students

Supplemental Examinations and Appeals
No candidate will be permitted to take more than twice any final examination, or part thereof, for any degree or certificate listed in this Calendar, except by permission of The Council of The College. A fee of $5.00 per paper in the form of a certified cheque or mon

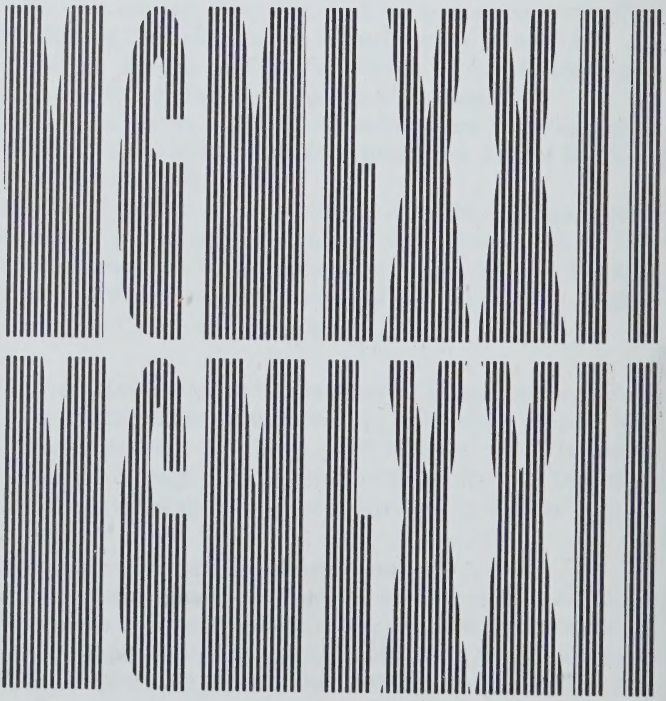
order payable to the *University of Toronto* will be charged for checking marks, a refund to be made if an error is found.

Academic Rights of Students

An appeal to The Council of The College of Education shall be permitted against failure or a Council ruling regarding procedure for fulfilling the requirements of the Bachelor of Education degree. An appeal is an instrument by which a student is protected against an error in grading or in final standing, or by which a student may seek to have a regulation of the University waived on academic or compassionate grounds.

Procedure: A student is required to submit, before the end of the calendar year, a written appeal to The Council of The College of Education.

Reconsideration by the Senate of the University of Toronto: A student shall have the right to require the Senate to consider the decision of The Council by making application to the Secretary of the Senate.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One-Year Program leading to the Bachelor of Education Degree and to the Interim High School Assistant's Certificate, Type B

chelor of Education Degree

a The Degree of Bachelor of Education will be awarded by the University of Toronto to students on successful completion of the One-Year Program which leads also to the Interim High School Assistant's Certificate, Type B, awarded by the Ontario Department of Education.
b A graduate of the One-Year program leading to the Interim Vocational Certificate, Type B, or the Interim Occupational Certificate, Type B (Practical Subjects), who holds an approved degree from a recognized university, who has the required number of years of wage-earning experience and who meets the other admission requirements peculiar to his subject, will be recommended also for the Bachelor of Education Degree. (See Section 77.)

e Type B ertificate

The Ontario High School Assistant's Certificate, Type B, is awarded by the Ontario Department of Education, and qualifies the holder to teach academic and general subjects in the secondary schools of Ontario. The Interim Certificate may become a Permanent High School Assistant's Certificate upon completion of two years' successful teaching experience in a secondary school in Ontario.

dmission irements

The basic requirement for admission to the program leading to the Bachelor of Education Degree, and to the Interim High School Assistant's Certificate, is an approved university degree from an accredited university.

The candidate's university degree program must include at least 45 credits in Arts, Science or Commerce subsequent to Grade 13, or equivalent.

The definition of a credit is derived from the basic assumption that there are approximately 60 credits in a four-year course. From this it follows that 15 credits is equivalent to a university year; and a credit may be defined as one-fifteenth of a university year.

In general, then, one university course equals three credits.

An applicant for admission to the Program for a High School Assistant's Certificate, Type B, shall make application to the Registrar, The College of Education, on an official form to be obtained from the Registrar. The closing date for receipt of applications is March 15, 1972.

With the completed application form, the following must be submitted:

1 *A certificate of birth.* If not born in Canada, the candidate mu submit a certificate from a competent authority that he is a Can dian citizen, or has Landed Immigrant status, or has applied f Canadian citizenship. An applicant must be at least 20 years of a before October 1 of the year in which he applies for admission. married woman applying for admission must submit a photocop of her marriage certificate to substantiate change of name.

2 *An official transcript in duplicate* showing proof of graduation a Bachelor of Arts, Bachelor of Science, Bachelor of Commerc Bachelor of Applied Science, Bachelor of Household Scienc Bachelor of Music, or Bachelor of Physical and Health Educatio or other acceptable degree from a university, after a universi course approved as to admission requirements and as to content the undergraduate courses.

A candidate for admission to The College of Education is requir to submit evidence of a negative tuberculin test reading or che x-ray taken within the year preceding September 11, 1972.

Admission acceptances must be confirmed, in writing, to the Regi trar of The College of Education within fourteen days of the date acceptance by The College, accompanied by a $50 deposit payab to the *University of Toronto* by certified cheque or money orde The deposit will be applied to the applicant's fee. Forty dollars of t $50 deposit will be refunded if the applicant withdraws his applic tion, in writing, before August 1, 1972.

Limitation on Enrolment. In the 1972–73 One-Year program lea ing to the Bachelor of Education Degree, enrolment will be limit to 1300 students. Among applicants who have fulfilled the admissi requirements, preference will be given to applicants with superi academic qualifications in teaching subjects for which there is shortage of qualified teachers in Ontario secondary schools.

It may be necessary to limit enrolment in some options owing limitations of staff and facilities.

28. Admission of Foreign Students

In a typical year, students from a dozen or more overseas countri will be registered in The College of Education. A special effort made to welcome qualified overseas students who plan to return their own countries on completion of their studies, and to m their special needs insofar as the resources of The College permit.

Foreign students and others *who are candidates for the Bache of Education degree but not for a teaching certificate of the Onta Department of Education* must comply with such conditions admission as The Council of The College may determine. One the requirements may be a Communication Test for Teaching the English Language (See Section 15).

29. Pre-College Observation Period

All those who intend to become students in the One-Year Progr of The College of Education are strongly advised to apply to principal of a convenient secondary school for permission to sp

a period in the observation of school organization, daily routine and teaching activities at the secondary school level. This period of several days' duration prior to the opening of The College term can be of genuine value to prospective teachers in acquainting them with problems of administration, instruction and student orientation at the beginning of the school year. For the 1972–73 Year the only dates available will be September 5, 6, 7, and 8.

ogram of Studies, One-Year Session, ng to the chelor of Education Degree

Program of Studies, One-Year Session, leading to the Bachelor of Education Degree

Successful candidates with Canadian citizenship or Landed Immigrant status will be recommended to the Ontario Department of Education for the Interim High School Assistant's Certificate, Type B.

The program consists of four parts:

Part I	TEACHING SUBJECTS	TWO subjects
Part II	EDUCATIONAL THEORY	FOUR courses, including Structural and Legal Bases of the Ontario School System
Part III	PROFESSIONAL PRACTICE	TEN weeks
Part IV	ADDITIONAL RELATED COURSES	ONE course

Any deviation from this program will be granted to a student only after approval of his petition to The Council of The College of Education. Petition forms are available from the Office of the Registrar. Consideration will be given in the following instances:

1 the substitution of a third teaching subject for the course from Part IV

2 the substitution of a second course from Part IV for one of the three optional courses from Part II. If a candidate is given permission to take two Additional Related Courses, the two may not be under the auspices of the same College Department

3 the substitution of a fourth optional course from Part II for the course from Part IV

4 the substitution of a graduate or undergraduate course in another department of the University which is relevant to one of his teaching subjects, provided that arrangements can be made with the department concerned and there is no conflict with practice teaching, for the course from Part IV. (A conflict may be avoided by taking classes in the evenings or on Saturdays.) A candidate permitted to take such a course will be subject to the regulations of the department for admission and credit.

Tuition fees will be paid by The College. Candidates for such a course should apply to the Registrar, The College of Education, not later than August 1. (Petition is not required for Mathematics 101.)

1 A candidate will be required to select at least two teachi subjects.

2 Normally, he will be required to elect *one* from list **a** and *o* from list **b**.

3 Any student may opt for *two* subjects from list **a**.

4 On petition to The Council of The College applicants with a ceptable qualifications in two subjects from list **b** may be permitt to select these as their two teaching subjects. Evaluation of t candidate's credentials will be undertaken by the departments co cerned, which will make their respective recommendations.

5 A student with academic qualifications for admission to cours leading to a Type A certificate or a Specialist certificate in a sing teaching subject will be permitted to select his second teaching su ject either from list **a** or **b**, with the concurrence of the departmen concerned.

a Normally a candidate will be required to elect at least one of t following, for which the prerequisite is at least 2 university cours (6 credits):

English 375
French 380
Geography 385
History 405
Latin 425
Mathematics 430
Science 470

b As his second subject, the candidate may elect another subj from **a** or one of the following for which there is no prerequis unless so indicated:

Art Education* 300 (6 university credits or background)
Business Education* 305
Computer Studies* 345 (acceptance into one of the followi departments: Business Education—Accountancy single opti or Mathematics or Science)
Counsellor Education* 355 (15 university credits in Psycholo Sociology, Economics or related fields, at least 6 of which m be in Psychology)
Economics 360 (9 university credits)
Elementary Education* 365
Geology 390 (9 university credits)
German 395 (6 university credits)
Greek 400 (6 university credits)
Home Economics* 410 (15 approved university credits)
Industrial Arts* 415
Italian 420 (6 university credits)
Music* 435 (6 university credits or background)

Physical and Health Education* (Women) 440
Physical and Health Education* (Men) 445
Political Science 450 (9 university credits)
Psychology and Sociology 455 (9 university credits)
Russian 460 (6 university credits)
School Librarianship* 465
School Librarianship* 466 (accredited degree in Library Science)
Spanish 475 (6 university credits)
Theatre Arts 485* or 480

*Courses in these subjects lead to an additional Departmental certificate (See Section 39).

NOTES:

Type A Candidates

In selecting his subjects from **a** and **b**, a candidate for the Interim High School Assistant's Certificate, Type A, must include the subject or subjects of the Type A Certificate.

Counsellor Education

Enrolment in the Counsellor Education Course may have to be limited depending upon student demand, availability of staff and adequacy of accommodation. Those candidates who receive credit for this course, may, after one year of successful teaching experience in Ontario, be admitted to Part II of the Counsellor Education Summer Course.

Languages

A candidate should not choose a modern language unless he has oral proficiency in the language and a thorough knowledge of its grammar. He will be required to undergo a language achievement test suited to this level. He should be fully aware that the major portion of the lecturing is done in the language concerned, and that he is expected to use the language in his teaching practice.
German, Greek, Italian, Russian, and Spanish may be elected only by a candidate for the High School Assistant's Certificate, Type A, in these subjects, except by permission of The Council of The College.

Physical and Health Education

Part II of the Intermediate Course in Physical and Health Education or the Specialist Course in Physical and Health Education may be taken as a third option under conditions outlined in Section 38.

School Librarianship

Because of the nature of the course, class size is limited.

Theatre Arts

Applicants should note that only one of the courses (485) leads

to the Theatre Arts Certificate without a subsequent summer sessi
Because of the nature of Theatre Arts, class size is limited.

Changes in Optional Subjects
The last date for changing optional subjects will be October 2, 19
thereafter changes may be made only with the approval of The Co
cil of The College of Education.

Part II
Educational Theory

Educational Theory
a All candidates will take the course Structural and Legal Base
the Ontario School System 201
b In addition, a candidate must elect three courses from th
offered by at least two of the departments as listed below:

Administration and Program Development
Program Development 202
Program Development 203
The Individual Student and the School Program 204
Administration in the Modern School 205
Evaluation: Measuring Student Performance 206
Individual Research Project 207

Educational Psychology
Psychology Applied to Education 230
The Adolescent – At Home, in School and in the Community 231
Teaching – An Interpersonal Process I 232
Teaching – An Interpersonal Process II 233
Individual Research Project 234

History, Philosophy, Sociology of Education
Comparative Education 260
Experience and Education 261
Modern Philosophy and Education 262
Progressive Education in Theory and Practice 263 (not offered
1972–73)
School and Society 264
Sociology of Education 265
Values in Education 266
Individual Research Project 267
Authority and Freedom in School 268
Issues in the History of Canadian Education 269
Cross-Cultural Education 270

Technical and Industrial Arts (designed for Technical Students)
Educational Psychology as it applies to Technical Education 706
History and Philosophy of Technical Education 708

Part III
Professional
Practice

Professional Practice
Candidates will be assigned to approved elementary and second
schools for observation and practice teaching for ten weeks du

the session. There will be two assignments of four weeks and a final assignment of two weeks. Practice Teaching is conducted under the tutelage of appointed associate teachers in cooperation with the teaching subject departments of The College.

Any candidate absent from scheduled practice teaching duties will be required to make up the assignment at the end of the term.

Part IV
Additional Courses

Additional Related Courses

These courses offer a candidate the opportunity to concentrate further on one of his teaching subjects by taking a related course, or to pursue an interest in another teaching subject or in the field of general education.

Administration and Program Development
Administration within the School System 125
Research Methods in Education 126
Teaching as a Profession 119

Art Education
Art and the Humanities 138
Design Education 114
Art History 145
Art Studio 146

Business Education
An Analytical Study of Promotional Techniques 152 (not offered in 1972–73)
Research and Developmental Program in Business Education 153 (not offered in 1972–73)

Computer Studies
Computers in Education 106
Educational Tests and Measurements 124

Counsellor Education
The Contemporary School Counsellor 150 (not offered in 1972–73)

Educational Media
Educational Media 107
Speech and Personal Communication 143

Educational Psychology
Introduction to Child Psychology 112 (not offered in 1972–73)
Principles of Programmed Learning 116
Psychology of Communications 117
Applied Learning Theory 148
Socialization and Identity 154

Elementary Education
Art and Crafts for Elementary Schools 130

French at the Elementary School Level 121
Music for Elementary Schools 131
Physical and Health Education for Elementary Schools 132

English
Developmental Reading 127
The Language Arts of the Cinema 122
English for the Slower Learner 141
Psycholinguistics 142

Geography
Curriculum Theory and Design 104
Game Theory and Simulation in Relation to Learning 110
Special Education for the Disadvantaged Learner 118

History, Philosophy, Sociology of Education
History of Education 111 (not offered in 1972–73)
Jean-Paul Sartre and Education 135
Philosophy and Education in the Classical World 134
Problems in Canadian Education 136

Home Economics
Child Study in Home Economics 144 (not offered in 1972–73)

Institute of Child Study
Principles and Practices of Child Study 001

Mathematics
Research Project in Mathematics Education 123
Mathematics 101 (University Course)

Modern Languages
Applied Linguistics 102
Culture and Society as it relates to the teaching of French 129
Culture and Society in German Language Teaching 103
Electronic Aids to Language Learning 108
French at the Elementary School Level 121

Music
Chamber Music 137

Physical and Health Education
Current Health Problems in North American Society 105
Outdoor Education 115
Affective Learning through Physical Education 151 (not offere
1972–73)

School Librarianship
The School Resource Centre and the Subject Teacher 149

Science
Environmental Studies 109
Science in the Elementary School 140

Technical and Industrial Arts
English: Rhetoric and Semantics 139
Introduction to Vocational, Occupational and Industrial Arts Education 113

Theatre Arts
Drama in Education 147

Conditions Academic Standing

The standing of candidates will be determined by the combined results of term work and of the final examinations in the subjects of Parts I, II, and IV, and by the record of Observation and Practice Teaching in Part III.

Standing in the subjects of Parts I, II, and IV will be issued as follows: A 80+, B 70–79, C 60–69, D 50–59, F below 50.

A student who obtains 50 per cent of the marks in *each* of the courses in Parts I, II, and IV and 50 per cent in *each* of the subjects taught in Part III may be recommended by The Council of The College for the Bachelor of Education Degree and for the Interim High School Assistant's Certificate, Type B.

A student who passes in Part III and fails in not more than two of the courses included in Parts I, II, and IV, of which only one may be a teaching subject listed in Part I, may be exempted from further attendance, but must take supplemental examinations in the courses failed, or otherwise meet the requirements of the Department(s) concerned.

A candidate who fails in a one-year program listed in The College of Education Calendar may be re-admitted in a subsequent year, with the approval of The Council of The College.

A candidate who withdraws from attendance in any program listed in The College of Education Calendar may apply for re-admission in a subsequent year on petition to The Council of The College.

lemental nations

Candidates for the High School Assistant's Certificate, Type B, who failed at an examination under former regulations and were exempted from subsequent attendance at The College of Education will take the final examination papers as prescribed herein, but their standing will be determined in the subjects as constituted under the regulations when they first wrote.

A candidate granted supplemental privileges may qualify for the certificate named below in one or more of the following ways, as authorized by The Council of The College of Education:

Type B

1 by taking an examination or examinations in August at the conclusion of a summer session;

2 by otherwise satisfying the requirements of the Department(s concerned;
3 by attending the Summer Program for Teachers with Profession Education, taking only the subject(s) failed and writing the examin tion at the conclusion of the course.
In all instances, application must be made not later than June 23.

Type A
1 by taking an examination or examinations in August at the co clusion of a summer session (Application must be made not later tha June 23);
2 by otherwise satisfying the requirements of the Department(s) co cerned (Application must be made not later than June 23);
3 by successfully completing the Type A Summer Seminar (Applic tion must be made not later than April 1).

Type A Practical Tests
Type A candidates exempted from attendance will take their su plemental practical tests at The College of Education. Application f teaching and practical tests must be made by December 31.

Second Failures
Should a student fail a second time in either or both of his s plemental examinations, he may be admitted to the Summer Sess for Teachers with Professional Education choosing different tional courses if he has the required prerequisites, or he may refused admission to further courses at the direction of The Coun of The College.

One-Year Program for the High School Assistan Certificate, Type A, and Specialist Certificate in Business and Commerce

33. The Type A Certificate

In general, candidates entering this program must hold an appro degree after a four-year university course following Ontario Gr 13, or equivalent, and graduation with at least second class stand

The Interim High School Assistant's Certificate, Type A, quali the holder for five years as an assistant teacher of academic general subjects in the secondary schools of Ontario.

The Interim Type A Certificate may become a Permanent H School Specialist's Certificate upon the completion of two ye successful teaching experience in Ontario on which the applic has been graded as above average on subjects covered by certificate.

The Permanent High School Specialist's Certificate qualifies holder to become Head of a Department in a secondary school.

34. Conditions of Admission

1 A candidate for a High School Assistant's Certificate, Type shall comply with the conditions of admission prescribed in Department of Education Memorandum 1970–71: 51. Advice ab these requirements as they apply to an individual candidate may had upon enquiry to the Office of Advanced Standing.

2 Applicants for admission to the Program for the High Sch Assistant's Certificate, Type A, shall be applicants for admissio the Program for the High School Assistant's Certificate, Type B.

3 No candidate will be awarded a High School Assistant's Ce cate, Type A, *before* he has been awarded a High School Assist Certificate, Type B.

35. The Specialist Certificate in Business and Commerce

Business Education

There is no Type A program in Business Education subjects, b program leading to the Specialist Certificate in Business and C merce is provided.

Academic Requirements

1 *Accountancy Specialist Certificate*

Admission to the program leading to the Accountancy Specialist e tificate will be granted to students who hold the degree of Bac of Commerce from an Ontario university, or an equivalent d from another province or country, with a standing of at least or C, whichever is higher, and who are otherwise qualified to the High School Assistants' Program, Type B. The student will

be required to try a supplemental examination in any of the required subjects in which he has obtained less than 70% or B standing, whichever is higher. The required subjects are the university equivalents of: Introductory Accounting, Accounting I, Accounting II, Law, and Economic Principles.

2 *Data Processing Specialist Certificate*
Admission to the program leading to the Data Processing Specialist Certificate in Business Education subjects will be granted to students who hold a Bachelor of Arts or equivalent degree with a standing of 60% or C, whichever is higher, and who have taken university courses in the required subjects or who can qualify by tests on these subjects. The required subjects are: Introductory Accounting, Computer Concepts, Introduction to Problem Solving, Business Data Systems, Advanced Problem Solving and Management Information Systems.

3 *Marketing Specialist Certificate*
Admission to the program leading to the Marketing Specialist Certificate in Business Education subjects will be granted to students who hold the degree of Bachelor of Business Administration from an Ontario university or an equivalent degree with a standing of at least 60% or C, whichever is higher, and who are otherwise qualified to enter the High School Assistants' Program, Type B. The candidate will be required to try a supplemental in any of the required subjects in which he has obtained less than 70% or B standing, whichever is higher. The required subjects are: Introductory Accounting, Introductory Marketing, Business Organization and Management, Economics, Marketing Principles and one additional Marketing course.

4 *Secretarial Specialist Certificate*
Admission to the program leading to the Secretarial Specialist certificate will be granted to students who hold the degree of Bachelor of Arts in Secretarial Science from an Ontario university or an equivalent degree with a standing of at least 60% or C, whichever is higher, and who are otherwise qualified to enter the High School Assistants' Program, Type B. The student will later be required to try a supplemental in any of the required subjects in which he has obtained less than 70% or B standing, whichever is higher. The required subjects are the university equivalents of Typewriting, Introductory Stenography, Applied Stenography, Office Practice, Office Procedures, Economic Principles and Secretarial Science I and II.

ecommen- of Type A Specialist ertificates

Subject to the condition that no student may be awarded a High School Assistant's Certificate, Type A, who does not already hold or is not also awarded a High School Assistant's Certificate, Type B, the final standing of candidates in attendance in the High School

Assistants' Program, Type A, will be determined by the records the practice teaching in the department or subject concerned, a by the combined results of the term work and the final examinatic in the same department or subject. The pass mark is second cl honours in the final examinations (including sessional records) a a rating of Good or better on the marks assigned to the pract teaching in the Type A subject(s).

37. Supplemental Examinations

Information regarding supplemental examinations is found Section 32.

Additional Certificates for Students in the High School Assistants' Program, Type B

A candidate in the High School Assistants' Program, Type B, may elect as a teaching subject one of a number of courses leading to additional teaching certificates.

grams and Notes

1 *Art Education*
On the successful completion of Art Education 300, a candidate may be recommended for Part I of the Intermediate Certificate in Art.

2 *Business Education*
Previous courses in business education or business experience is not required of a candidate who selects one or both teaching subjects in Business Education. A candidate without sufficient background or skills may be required to attend an evening course in one or more of the subjects in Part I.
A candidate who selects only one teaching subject in Business Education leading to Part I of the Intermediate Accountancy, Data Processing, Marketing or Secretarial certificate must take one other teaching subject. He will be required to attend one additional summer course to qualify for the Intermediate Certificate in the Business Education field concerned. A candidate who selects Parts I and II in the One-Year Program may qualify for the Intermediate Certificate.

3 *Counsellor Education*
Admission requirements are 15 university credits in Psychology, Sociology, Economics or related fields, at least 6 of which must be in Psychology.
Those candidates who receive credit for this teaching subject, may, after one year of successful teaching experience in Ontario, be admitted to Part II of the Counsellor Education Summer Course.

4 *Elementary Education*
Other than the general requirements for admission to the High School Assistants' Program, Type B, there are no prerequisites for admission to Elementary Education. University courses in the arts, science, psychology, child study and sociology are considered most valuable for participation in the program.

5 *Home Economics*

Admission to the course for the Intermediate Home Econom
Certificate is restricted to candidates who submit evidence
graduation with a standing not lower than 60% or C, whichever
higher, in the final year of a university program having at least f
approved courses in Home Economics.

6 *Industrial Arts*

Experience or education in Industrial Arts is not a prerequisite. Af
successful completion of this teaching subject, a candidate m
obtain the Elementary Industrial Arts Certificate by successfu
completing an additional seven-week summer program.

7 *Music*

Admission to the Intermediate Instrumental Music course will
restricted to candidates for Part I of the Intermediate Vocal Mu
Certificate, and will be subject to the approval of the Music Depa
ment.

8 *Physical and Health Education*

There are no prerequisites for admission to the Intermediate cour
Part I.

Students who meet the admission requirements may become can
dates for Part II of the Intermediate Certificate in Physical a
Health Education or for the Specialist Certificate in Physical a
Health Education.

The admission requirement for the Intermediate course, Part II,
a minimum of six university credits in Physical and Health Educati

The admission requirement for the Specialist course is a minimu
of 24 university credits in Physical and Health Education (exclusi
of methods courses).

Courses leading to Part II of the Intermediate Certificate and
the Specialist Certificate will be taken as a third teaching subject
addition to the course leading to the Interim High School Assistan
Certificate, Type B, if a sufficient number of applications are receiv
to warrant inclusion of these courses in the program. To be eligible
candidate must also select the Physical and Health Education cou
leading to Part I of the Intermediate Certificate as one of the tea
ing subjects.

After successful completion of Part II of the Intermediate Ce
ficate, a candidate may proceed to the Specialist Certificate
summer sessions but not until the candidate has completed one y
of successful teaching.

9 *School Librarianship*

Because of the nature of School Librarianship, enrolment is limit
All applicants will be required to have a personal interview wit
member of the School Librarianship Department as part of
selection process.

This course is Part I of a two-part program leading to the Intermediate Certificate in School Librarianship. After successful completion of the Intermediate Part I course and one subsequent year of successful experience in a school library, a candidate may proceed to a summer session to complete the requirements for the Intermediate Certificate in School Librarianship. After successful completion of the Intermediate Certificate and one subsequent year of successful experience in a school library, a candidate may proceed to a further summer session to complete the requirements for the Specialist Certificate.

ecommen-dation of Additional ertificates

10 *Theatre Arts*
Because of the nature of Theatre Arts, enrolment is limited. All applicants will be required to have a personal interview with a member of the Theatre Arts Department as part of the selection process.

Art Education, Business Education, Counsellor Education, Elementary School, Home Economics, Industrial Arts, Music, Physical and Health Education, School Librarianship, Theatre Arts

On the recommendation of The Council of The College, one of the following additional certificates or credits may be granted to a candidate in the Program for a High School Assistant's Certificate, Type B, provided that the student is awarded the High School Assistant's Certificate, Type B:
Part I of the Intermediate Certificate in Art
Part I or Parts I and II of the Intermediate Certificate in a Business and Commerce subject (Accountancy, Data Processing, Marketing, Secretarial)
Credit toward Part I of the program leading to the Specialist Certificate in Guidance
Elementary School Teacher's Certificate, Standard 4
Intermediate Certificate in Home Economics
Credit for Part I of a two-part program leading to the Elementary Certificate in Industrial Arts
Part I of the Intermediate Certificate in Vocal Music
Part I of the Intermediate Certificate in Vocal and Instrumental Music
Part I of the Intermediate Certificate in Physical and Health Education
Part II of the Intermediate Certificate in Physical and Health Education*
Specialist Certificate in Physical and Health Education*
Part I of the Intermediate Certificate in School Librarianship
Certificate in Theatre Arts
Credit toward Certificate in Theatre Arts.

**Physical and Health Education*
On recommendation of The Council of The College, Part II of the Intermediate Certificate in Physical and Health Education may be

granted to a candidate who achieves the above stated standard fo Part I of the Intermediate Certificate and who obtains 50% of th marks assigned to the written examinations and practical tests o the course leading to Part II of the Intermediate Certificate. Th Specialist Certificate may be granted to a candidate who achiev the above stated standard for Part I of the Intermediate Certifica and who obtains a grade of B in the Observation and Practice Teac ing in the course and a grade of B in the written examinations an practical tests of the course leading to a Specialist Certificate.

Ontario Teachers' Aquatic Standard – A candidate who is exempte by a medical certificate from a course in aquatics or a candida who has failed to meet the aquatic standard may be awarded certificate in Physical and Health Education endorsed 'witho aquatics'. A candidate who meets the aquatic standard may b awarded a certificate endorsed 'Credit O.T.A.S.'.

40. Programs for Candidates not recommended for a Department of Education Certificate

A candidate for one of the following additional certificates who ha met the other requirements of the Type B certificate but has faile to obtain pass standing in the remainder of the course may ear pass standing and be recommended for standing by following th conditions listed below:

1 In *Art*, *Vocal Music or Instrumental Music*, a candidate wh fails in not more than two subjects of the written and practical tes may complete his standing by passing in the subjects concerned a a subsequent examination without further attendance, but in th subjects of the practical tests such a candidate must try tests co ducted at the Summer Session or by arrangement approved by Th Council of The College. Any other candidate who fails shall repea the course for standing.

2 In *Business Education*, a candidate who fails in the written o practical tests in not more than two subjects may complete hi standing at a subsequent examination or by attendance at a subse quent Summer Session.

3 In *Counsellor Education*, a candidate who fails to obtain standin may complete his standing, without further attendance, by meetin certain conditions which will be determined in each case by Th Council of The College.

4 In *Home Economics*, a candidate who fails in the written ex aminations but passes in all the subjects of the term work ma complete her standing by passing in the written examination at subsequent date without further attendance. A candidate who passe in the written examinations but fails in one or more of the subject of the term work may obtain her standing by completing success fully the Home Economics option of the High School Assistants Type B Summer Program for Teachers with Professional Educatio Any other candidate who fails shall repeat the course for standing

5 In *Industrial Arts*, a candidate who fails in the written examinations but passes in all the subjects of the practical tests may complete his standing by passing in the written examination at a subsequent date without further attendance. A candidate who passes in the written examinations but fails in one or more of the subjects of the practical tests may obtain his standing by completing successfully a subsequent summer course under conditions to be determined by The Council of The College. Any other candidate who fails shall repeat the course for standing.

6 In *Physical and Health Education*, if a candidate fails to achieve the passing standard, the course must be repeated either in a subsequent Summer Session or in the regular One-Year Program.

7 In *School Librarianship*, a candidate who fails to achieve a passing standing in all subjects of the term work will normally be required to repeat the course in a subsequent summer session. However, a candidate who fails only in the written examination in Organization of Materials may complete his standing by passing this subject at a subsequent examination without further attendance.

8 In *Theatre Arts*, a candidate who fails to achieve a passing standard will normally be required to fulfil the requirements by attending a summer program selected by the Theatre Arts Department.

41. The Elementary School Teacher's Certificate

In order to qualify as a teacher in both elementary and second schools in Ontario, a candidate may elect as one teaching subje program leading to the Interim Elementary School Teacher's Ce ficate.

42. Conditions of Admission

1 Candidates shall comply with the conditions of admission attendance prescribed for candidates of the High School Assista Program, Type B.

2 Applicants should note that no candidate will be awarded Interim Elementary School Teacher's Certificate before he awarded an Interim High School Assistant's Certificate, Type B.

3 Candidates should have a university background with breadth the arts, science or languages together with courses in psycholo sociology or child study.

43. Program of Studies

Because the Program for the Elementary School Teacher's Cer cate offers instruction in a group of courses, the total lecture ti is *ten hours per week*, including a course in Additional Rela Courses. This fact should be considered carefully when the candid is selecting subjects in the High School Assistants' Program, Type

The Elementary Education Program 365 consists of the follow courses and activities:

PART I

Compulsory Courses:

366 English for Elementary Schools (2 hours)
367 General Methods and Management Home Room (1 hour)
368 Mathematics for Elementary Schools (2 hours)
369 Science for Elementary Schools (1 hour)
371 Social Studies for Elementary Schools (2 hours)

and at least *one* of the following Additional Related Courses:

130 *Art and Crafts for Elementary Schools** (2 hours). An int duction to the creative use of media in two and three dimensio basic design, point, line and shape; print-making; teaching metho subject integration.

121 *French at the Elementary School Level** (2 hours). French as a second language from the earliest grades of the elementary school; programs; procedures specific to the age level; audio-visual aids. Candidates able to satisfy the admission requirement of the Department of Modern Languages may take this course in lieu of Art, Music or Physical Education.

131 *Music for Elementary Schools** (2 hours). A study of contemporary approaches to music learning in elementary schools. Student teachers in this course will be required to participate in a variety of activities.

132 *Physical and Health Education for Elementary Schools** (2 hours). A critical examination of teaching procedures which relate specifically to the aims of Physical and Health Education; an activity course based on participation in and examination of games, gymnastics and dance appropriate for the healthy development of children ages 6 to 14.

*Enrolment preferences will be given to candidates registered in the Elementary Education Program.

PART II

Observation and Practice Teaching (five or six weeks) in selected elementary school classrooms of Metropolitan Toronto. Such weeks are included within the ten weeks of Observation and Practice Teaching required of all students in the Program for the High School Assistant's Certificate, Type B.

plemental minations

A candidate failing in one or more subjects of the Elementary School Program may write the supplemental examination(s) in August.

Evaluation f Student Progress

The evaluation of student achievement in subjects of the Elementary Education Program is conducted by each of the College departments involved: English, Geography, History, Industrial Arts, Mathematics, Modern Languages, Music, Physical and Health Education, Science, Elementary Education (Home Room). Methods of evaluation vary from department to department and encompass a wide range of testing instruments: performance tests, oral tests, essays, exercises, research assignments, seminars, objective tests and examinations. Each department advises students, in writing, regarding the specific nature of its own evaluation procedures.

46. Institute of Child Study

*Diploma in Child Study**

Qualified students may participate in the academic program of t Institute under one of the following arrangements:

1 *As a full-time student* enrolled for two years in programs in Ear Childhood Education, or Childhood Assessment and Counsellin awarded the Diploma in Child Study by the University of Toronto.

2 *As a full-time student with three or more years' prior teachi experience* enrolled for one year in special programs in Early Chil hood Education or Childhood Assessment and Counselling: award the Diploma in Child Study by the University of Toronto.

3 *As a graduate student from another department* attending cours or making use of the Institute's research facilities by arrangeme through his department.

4 *As a special student* enrolled in one or more courses.

Diploma Program in Child Study

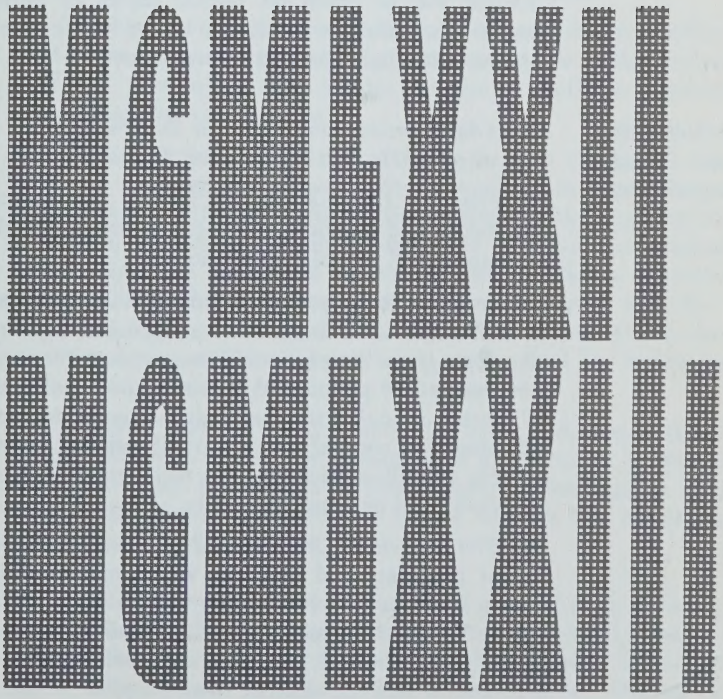
The University of Toronto awards a Diploma in Child Study students who complete a full program of studies as prescribed.

The program is intended for men and women who plan to speciali in the child field and includes intensive study in foundation a applied subjects.

Requirements for Admission to the Diploma Program: a Bachelo degree with B standing, or professional teacher qualifications wi three or more years' teaching experience in addition to a Bachelo degree and academic and professional standing as approved by t Admissions Committee.

Course Regulations for the Diploma in Child Study: In order qualify for the Diploma in Child Study a student must successfull complete fourteen course credits, including all courses required his program. Teachers with three or more years' teaching experien may complete programs in Childhood Assessment and Counsellin or Early Childhood Education in one year with seven credits. O course credit is given for a standard course requiring two hours p week of lectures plus readings, projects and, in some cases, fie work.

*A separate Calendar of the Institute of Child Study is available students who wish more detail about the Diploma Program and t description of courses offered.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Details of Courses in Programs leading to the Bachelor of Education Degree and to the Interim High School Assistant's Certificate and Additional Certificates

In each case, the numeral in brackets indicates the number lecture hours per week.

47. Required Course

All students proceeding to the Bachelor of Education Degree a to the High School Assistant's Certificate, Type B, will be requir to take:

201 *The Structural and Legal Bases of the Ontario School Syst* (1 hour). The organization of provincial and local systems education; powers and duties of the various educational authoriti the Education Acts and Regulations of the Province of Ontar Course content will be covered primarily through directed readin Lectures will be given on related topics of current educatio interest. The course is conducted by the staff of the *Department Administration and Program Development.*

48. Administration and Program Development

400 *Administration and Program Development*
Courses offered in Part II Educational Theory

202 *Program Development* (2 hours). An examination of c rent theory and practice in curriculum design and their relationsh to teaching and school organization.

203 *Program Development* (4 hours). An examination of the r of the teacher as a designer of educational experiences within t school program. Emphasis will be given to the application of c rent theory and practice of curriculum design to the developme of specific school programs which attempt to meet a variety individual and societal needs. Participants will undertake individu projects as well as participate as members of a curriculum team the production of group materials.

204 *The Individual Student and the School Program* (2 hours School programs and practices which meet individual differenc among students. A general study will be made of innovative teac ing and organizational patterns, including particularly the no graded school, credit organization, house plans, team teachin independent study, and other related topics.

205 *Administration in the Modern School* (2 hours). A practical study of the use and organization of school resources and services in providing an effective educational program. Emphasis will be placed on the role of the teacher in phases of school operation such as discipline, staff relationships, organization of classes, individualizing instruction, evaluation procedures, and the design and implementation of overall school programs.

206 *Evaluation: Measuring Student Performance* (2 hours). A study of current evaluation practices in the schools. The course will develop some of the theoretical issues underlying evaluation methods, the design and marking of a wide variety of testing instruments, including essay, objective, oral, project, and self-assessment. The fair assessment of individuals, comprehensive systems for schools, distinctions between subjects, home reporting, concepts of promotion and failure, and grading systems will also be considered.

207 *Individual Research Project* (2 hours). Highly qualified students who wish to engage in an individual research topic must receive the approval of the Department at College registration. The privilege of submitting an Individual Research Project is not open to extramural candidates.

Courses offered in Part IV, Additional Related Courses

119 *Teaching as a Profession* (2 hours). A study of the development of teaching as a profession; the current status of the profession, and new orientations within the North American context; interprofessional relationships.

125 *Administration within the School System* (2 hours). A review of planning and administrative procedures in large systems of education. Particular emphasis will be given to the organization of learning resources, student services, and parent-teacher-student relationships. The interaction of trustees, senior officials, resource personnel, and school administrators will be considered. The effectiveness of large systems in formulating and in achieving desirable educational programs for the individual student and for society as a whole will provide a constant focus for study.

126 *Research Methods in Education* (2 hours). A course introducing students to methods of research used in Education. Emphasis will be directed to research in Educational Administration and Program Development. During the course students will develop a research project of their own.

49. Art ducation

300 *Art Education* (8 hours). Three major areas of study: History and Philosophy of methods of Art Education (2 hours); Instruction and Practice in two- and three-dimensional design in various media, with methods of class presentation (4 hours); History of

Canadian Art and Architecture, with emphasis on the use of lo materials as the basis for a study of Art History in second schools (2 hours).

0100 *Seminar in Art Education* (4 hours). For Type A candida in Art. The development of curricula for senior classes; the use resource materials; experimental work in media; examination aesthetic theories; research in Art history; environmental design.

Courses offered in Part IV, Additional Related Courses

138 *Art and the Humanities* (2 hours). An examination of relationships between Art, Literature and Music in Western civili tion.

114 *Design Education* (2 credit hours). A lecture-studio cou which examines problems presented to the artist by the mach production of industrial society. The impact of technological velopments upon environment; the solutions which have b formulated. Tentative explorations of problems presented by rec developments. This course is offered in conjunction with the Te nical and Industrial Arts Department.

145 *Art History* (2 hours). The development of the visual a with emphasis on Canadian examples and the content of curr local exhibitions. (May *not* be taken in combination with Education 300.)

146 *Art Studio* (2 hours). Instruction and practice in various media, for the teacher's own artistic development as well as cla room application. (May *not* be taken in combination with Education 300.)

50. Business Education Courses for the Intermediate Certificate

1 Accountancy Program

a *one option*	**b** *two options*
Intermediate Part I	*Intermediate Part I*
Introductory Accounting 309	plus
	Intermediate Part II
Typewriting 307	Business Teaching 316
	Applications of Accounting 317

2 Data Processing Program

a *one option*	**b** *two options*
Intermediate Part I	*Intermediate Part I*
Introductory Accounting 309	plus
	Intermediate Part II
Typewriting 307	(See Computer Studies Section 51)

3 Marketing Program

a *one option*	**b** *two options*
Intermediate Part I	*Intermediate Part I*
Introductory Accounting 309	plus

Introductory Marketing 314

Intermediate Part II
Business Teaching 316
Related
Marketing Concepts 326

4 Secretarial Program

a *one option*
Intermediate Part I
Typewriting 307
Introductory Stenography 312

b *two options*
Intermediate Part I
plus
Intermediate Part II
Business Teaching 316
Office Procedures 324

for the pecialist rtificate

1 *Accountancy Specialist*
Accounting 337

2 *Data Processing Specialist*
(See Computer Studies Section 51)

3 *Marketing Specialist*
Marketing 339

4 *Secretarial Specialist*
Secretarial Science 338

ption of usiness ducation Courses

307 *Typewriting* (3 hours). The development of a basic facility in typewriting, the application of this facility and the problems of teaching the junior grades in the secondary school.

309 *Introductory Accounting* (3 hours). To acquaint students with general accounting fundamentals including general bookkeeping practices and basic accounting concepts, and the teaching of this in the secondary school.

312 *Introductory Stenography* (3 hours). A course in the theory and application of Pitman Shorthand including consideration of the theoretical aspects of high speed writing and the teaching methods, approaches, and practices currently in use in the schools. The course includes the investigation and practices of advanced teaching techniques.

314 *Introductory Marketing* (3 hours). A course surveying the total distribution process with particular emphasis on the Canadian retail organization. The study will be consumer oriented.

316 *Business Teaching* (1 hour). A course in the fundamental philosophies pertaining to the instruction of Business Education subjects; specialized applications to the individual subject areas; the correlation of all business subjects.

317 *Applications of Accounting* (3 hours). The development of a basic facility in the use of business machines and a knowledge of the organization, law, financing and computerization of a business.

324 *Office Procedures* (3 hours). A practical course in the

teaching of stenographic techniques including the practices a procedures followed in the modern office.

326 *Related Marketing Concepts* (3 hours). A survey of the p pheral aspects of marketing, both from a content and methodc gical viewpoint; the functional aspects of business and a study distributive processes; the practical implications of market mathematics as related to business machine applications.

337 *Accounting* (1 hour). Accounting for partnerships, cor rations, departments and manufacturing and the methods of p senting these topics.

338 *Secretarial Science* (1 hour). A course in advanced ste graphic and secretarial practices; the organization and preparat of modern office practices and procedures including current a advanced teaching techniques and procedures.

339 *Marketing* (1 hour). The principles of teaching market subjects as they apply to the upper grades of the Business Educat course; practical applications and their relevance to the individ in our consumer-oriented society.

Courses offered in Part IV, Additional Related Courses

152 *An Analytical Study of Promotional Techniques* (2 hour Not offered in 1972–73.

153 *Research and Developmental Program in Business Educat* (2 hours). Not offered in 1972–73.

51. Computer Studies

345 *Computer Studies*

Required:
Computer Concepts 346
Introduction to Problem Solving 347
Computer Studies Principles and Practices 348

For Business Education candidates wishing to obtain a Data P cessing Specialist Certificate, the following additional courses a required:
Advanced Problem Solving 349
Business Data Systems 351
Management Information Systems 352
For Mathematics and Science candidates who have successfu completed university courses equivalent to 346 and 347, one the following courses will be substituted:
Advanced Problem Solving 349
Computer Applications 353

346 *Computer Concepts* (Prerequisites: None) (3 hours, Septe ber–December).

Basic computer concepts, flowcharting techniques, computer terminology, equipment peripheral to the computer system and information flow through a computer system; emphasis on problem solving techniques using the computer.

347 *Introduction to Problem Solving* (Prerequisites: Computer Concepts or Departmental Consent) (3 hours, January–April).
A course using the computer as a problem solving tool; students introduced to a high level programming language, as a vehicle of communication, and problem solving through flowcharting, coding, testing and debugging.

348 *Computer Studies Principles and Practices* (Prerequisites: Computer Concepts or Departmental Consent) (3 hours).
The problematic approach to the teaching of computer concepts and computer programming; exploration of the "hands-on" versus "theory" and the "hypothetical computer" versus "actual hardware" approach. Topics to be discussed: transfer of learning from one computer to another; optimum class size; available teaching aids; motivation techniques; evaluation; course objectives.

349 *Advanced Problem Solving* (Prerequisites: Introduction to Problem Solving or Departmental Consent) (3 hours).
Opportunities provided for the students to use the computer to solve more advanced problems. In addition to the basic documentation requirements, the students will be required to design the necessary input/output documents, and prepare and update suitable data files.

351 *Business Data Systems* (Prerequisites: Introduction to Problem Solving or Departmental Consent) (3 hours).
Organization of a business, management control and the flow of information through the business; emphasis placed on the flowcharting of some of the main business systems with suitable documentation, record layout and forms design; use of unit record equipment in a computer environment.

352 *Management Information Systems* (Prerequisites: Business Data Systems or Departmental Consent) (3 hours).
Students are expected to apply systems knowledge to the solving of a case study. They will be required to design, flowchart, program and document a complete system. Students will also be required to implement aspects of their recommendations.

353 *Computer Applications* (Prerequisites: Advanced Problem Solving or Departmental Consent) (3 hours).
Statistical techniques, matrix operations, approximations, etc. are utilized in the solution of scientific/research problems on the computer.

0600 *Seminar in Computer Studies* (4 hours). For Type A candidates in Computer Science. A course designed to explore the

principles and practices of teaching computing in the seconda schools. Topics to be discussed: the use of introductory languag elements of problem design and problem solving, individual stude differences, the use of the computer as an instructional tool, a effect of computer studies on other classroom studies.

Courses offered in Part IV, Additional Related Courses

106 *Computers in Education* (2 hours). A course designed study the use of the computer as an instructional and administrati aid in education. Areas to be discussed include: computer-assist instruction, test scoring, item analysis, curriculum, educatior research, student accounting and other student-oriented are Emphasis is on the computer as a problem-solving tool. Prior co puter courses or knowledge is not required. Access to the compu centre will be available to students for class-assigned and oth approved projects.

124 *Educational Tests and Measurements* (2 hours). A cou emphasizing the practical approach to tests and measurements. S dents will be required to construct tests and use the computer evaluate their results. Other areas of study include: techniques measurement; test construction; application of testing; concepts educational measurement. Computer training or experience r essential.

52. Counsellor Education

355 *Counsellor Education* (6 hours). Counselling theory and pra tice; assembling educational and occupational information for st dent use; individual assessment procedures; group methods a processes; history and foundations of Guidance.

Course offered in Part IV, Additional Related Courses

150 *The Contemporary School Counsellor* (2 hours). Not offer in 1972–73.

Winter Evening Courses
Dates: October 1, 1972 to May 1, 1973
Program: Parts II and III of the Counsellor Education Courses described in the Counsellor Education Course booklet MAY offered to a limited number of candidates seeking the Guidan Specialist Certificate.
Application forms must be completed and returned along wi necessary documents not later than August 1, 1972, to T Director, Winter Evening Courses in Counsellor Education, T College of Education, 371 Bloor Street West, Toronto 181.

53. Economics

360 *Economics* (4 hours). A series of lectures and seminars on t following with specific reference to classroom practice:
A survey of Economics curricula as set out by the Department

Education; methods and materials useful in the teaching of Economics; aims in teaching Economics; the content of an Economics course; principles of course construction; examination and evaluation of a variety of approaches to the teaching of Economics; the student of Economics; motivation and evaluation; dealing with individual differences.
Preparation of a course of study in Economics.

0900 *Economics* (4 hours). For Type A candidates in Economics and in Political Science and Economics. A series of lectures and seminars with emphasis on the practical application of the following:
The nature of Economics; aims and methods in the teaching of Economics; the content of an Economics course; principles of course construction; the examination of a number of approaches to the teaching of Economics, e.g., those of Lovenstein, Wiggins, Senesh, Darcy & Coleman; Economics within the History and Social Science Program; evaluation.
Preparation of a course of study in Economics.

lucational Media

Courses offered in Part IV, Additional Related Courses

107 *Educational Media* (2 hours). A study of the basic principles of communication; the use of the various media such as film projectors, tape recorders and television will be a major part of the course.

143 *Speech and Personal Communication* (2 hours). A course directly related to the needs of the teacher as speaker and listener in the classroom. It stresses effective projection of the voice, speech development in the student, the influence of technology on speech communication. This course is offered to students in the one-year Bachelor of Education Program only.

lucational sychology

Educational Psychology

Courses offered in Part II, Educational Theory

230 *Psychology Applied to Education* (2 hours). Open to all students. Designed to show relevance of general Psychology to teaching. Provides an overview of the areas of Psychology related to education and teaching; problems in human communication, role of feedback, non-verbal communication, mass media, T.V., radio. Modern theories of learning will be examined and compared; the relevance of learning theory to motivation, aptitudes and attitudes, learning discrimination and skills, the slow learner, development, maturation and special education, research in education, programmed learning and computer-assisted instruction.

231 *The Adolescent – At Home, in School and in the Community* (2 hours). The adolescent period; adolescent needs and processes

of adjustment; the adolescent and social class; adolescent-adu relationships; the adolescent and his peer group; physical develo ment; intellectual development; development of interests, attitud and values; heterosexual development of adolescents; adolesce disciplinary problems; adolescent delinquency.

232 *Teaching – An Interpersonal Process I* (2 hours). The teach as partner in an interpersonal learning process; increased awarene and insight about forces operating in groups; how one's own b haviour affects group productivity; application of theory to develo ment of innovative plans for better classroom teaching using lar and small groups.

233 *Teaching – An Interpersonal Process II* (4 hours). A cour planned for students who wish to pursue in greater depth the are of study included in Course 232. In addition, it will include enqui into the principles of sensitivity training and the various types encounter groups, and the way in which experience in small grou living will increase the awareness of the forces affecting the teach and the student in the school situation. Increased self-understandi and the ability to structure the social environment for the improv men of learning are among the goals of this course.

234 *Individual Research Project* (2 hours). Highly qualified st dents who wish to engage in an individual research topic mu receive the approval of the Department at College registratio The privilege of submitting an Individual Research Project is n open to extramural candidates.

Courses offered in Part IV, Additional Related Courses

112 *Introduction to Child Psychology* (2 hours). Not offered i 1972–73.

116 *Principles of Programmed Learning* (2 hours). Preparing an structuring objectives; programming styles; linear and branchin principles of writing and revising programs; feedback; compute assisted instruction; program evaluation.

117 *Psychology of Communications* (2 hours). A course dealin with the field of communications as a Behavioural Science. It concerned with such areas as persuasion and dissuasion; Informa tion – storage, retrieval and generation; Loss of Message – interpe sonally and in the formal and informal learning situations. Media limitations of and possible uses of – in educational systems. Soci ties' and institutions' ability to generate meaningful informatio One of the aims in this course is to assist the students to cope wit increasing amounts of information available and to cope with i creasing complexity rather than avoid it.

148 *Applied Learning Theory* (2 hours). An in-depth study theories of learning; factors affecting learning and retention; appl

cations to classroom situations and to special education problems. (May not be taken in conjunction with *Psychology Applied to Education* 230.)

154 *Socialization and Identity* (2 hours). An examination of the various theories in social psychology contributing to an understanding of human social development; an exploration of the development of individuality and group identities along with the factors of social interaction influencing the development of personality. Emphasis will be placed on contributions to personal growth made by teachers and schools at elementary and secondary levels.

lementary Education

365 *Elementary Education.* For Details of Courses, see Sections 41 to 44.

6. English

375 *English* (4 hours)

LITERATURE:

Values inherent in the study of good literature; basic approaches; various methods of presenting such literary forms as the poem, the drama, the essay, the short story, and the novel; the choosing of suitable text-books for pupils of different abilities and grades; planning courses of study; setting and marking examination papers; oral and supplementary reading; problems related to the teaching of English literature.

COMPOSITION:

The basic aim in teaching composition; place and treatment of grammar, rhetoric, logic and word study in the teaching of composition; principles to be followed in arranging courses; studying models; assigning, planning, evaluating and correcting compositions; improving the pupil's oral English; conducting class discussions; problems related to the teaching of English composition.

MEDIA:

The basic aim in treating mass media; objectives; categories; procedures.

ELECTIVES:

Creative thinking; developmental reading; creative drama; screen education; group dynamics; creative writing; mass media; psycholinguistics; English as a second language; English in the nongraded school.

1100 *Seminar in English* (4 hours). For Type A candidates in English.

Teaching and discussion of selected topics; the English specialist; the Head of the Department; new methods; sequential programming; thematic study; comparative techniques; enrichment; acceleration; the slow learner; educational television; the new grammar; works in translation; remedial and developmental reading; advanced

and general courses; mass media; creative thought; creative writi
professional development; the ungraded school; the future of E
lish studies.

Courses offered in Part IV, Additional Related Courses

122 *The Language Arts of the Cinema* (2 credit hours). A cou
designed to study trends in contemporary cinema. Although t
course concentrates mainly on feature films of such directors
Hitchcock, Bergman, Varda, Antonioni, Fellini, Godard, Truffa
Resnais, Losey and Lester, it does not neglect the popular cine
nor does it omit experimental short films. The several arts of t
director, script writer, actor, editor, lighting-cameraman, compos
and sound man are studied so that the students may have a f
appreciation of the language arts amalgam that we experience
the cinema. Enrolment is limited.

127 *Developmental Reading* (2 hours). A course designed to int
duce students to the possibilities of developmental reading at t
secondary school level. Basic principles underlying an instructio
program will be discussed. Specific methods of determining readi
achievement, selecting patterns of organization, and planning t
instructional program, will be introduced. Of major emphasis w
be the devising of practical developmental reading programs. E
rolment is limited.

141 *English for the Slower Learner* (2 hours). Primarily a cou
dealing with the development of effective programs for slow
learners at the secondary school level. Specific methods of instru
ing such pupils will be emphasized: their needs, interests, a
abilities will be explored. Careful examination of perception, rea
ing, speaking, listening and writing skills, will be stressed. Stude
will investigate the nature and validity of both reading and int
ligence tests as they apply to the slower learner. Enrolment
limited.

142 *Psycholinguistics* (2 hours). A course designed to explore t
psychological, biological, and sociological parameters of language
a communication system. Some of the main areas of investigati
are: language acquisition in children; psychological models of la
guage learning; linguistic models of grammar; general semanti
non-verbal modes of communication; language games; langua
study programs in the school (history of grammar, dictionaries a
writing systems, language history, etymology, morphology); la
guage and thought; language as a sociological determinant. Spec
attention will be given to the construction of language units f
classroom study. Enrolment is limited.

57. Geography

385 *Geography* (5 hours). Listed below are a number of Geograp
course units designed to give a degree of flexibility in the prepa

tion of Geography teachers. This professional course has been designed to meet the demand for professionally trained people who are either

i graduate Geographers (Type A candidates), or
ii other University graduates (Type B candidates)

and who will proceed to a career in education, either as a specialist teacher of Geography, or as one who wishes to teach Geography together with other subjects. Because the department uses a team approach, two or more members of staff may be concerned with each unit.

386 *Geography: Orientation.* The scope of the role of the Geography teacher.

387 *Geography: Curriculum Planning.* Recognition of a curriculum framework as a general context within which the strategy of obtaining educational objectives and classroom practice may be discussed; examination of courses of study in order to identify and evaluate their components in relation to the principles of curriculum design.

388 *Geography: Instructional Techniques and Procedures.* Recognition, analysis and construction of learning situations in order to understand how educational objectives in Geography are achieved; study of various resource materials, teaching procedures and techniques which facilitate the achievement of such objectives; investigation and construction of objectives and the development of units of study as an organizing structure within which effective instruction and learning take place. Practice Teaching includes a clinical observation of the teaching-learning process; an expression of philosophy, techniques and procedures in the classroom and in the field.

389 *Geography: Educational Measurement and Evaluation.* A study of ways to evaluate the effectiveness of learning experience.

509 *Geography: Field Studies.* Integration of the objectives and techniques of 'landscape' study.

371 *Geography* (Social Studies) for students in the Elementary Education program. A program based on the second, third and fifth Geography courses outlined above.

1500 *Seminar in Geography* (3 to 4 hours). For Type A candidates in Geography. Candidates will meet as a special class in a program concerned with the study of Principles of Curriculum Design as models for the development of geography curricula which meet the various future conditions and variables in education.

Courses offered in Part IV, Additional Related Courses

104 *Curriculum Theory and Design: A Research Seminar* (2

hours). Enquiry into the theory and design of a curriculum a the examination of curriculum projects in the field of social studi and geography at the elementary and secondary school levels.

110 *Game Theory and Simulation in Relation to Learning* hours). An introduction to game theory and simulation as approach to learning in geography and social science.

118 *Special Education for the Disadvantaged Learner* (2 hours An introduction to the scope and range of this specialized field education related to the needs of exceptional children. (Students w enrol must be prepared to meet with guest instructors at vario times and places.)

58. Geology

390 *Geology* (4 hours). Value and objectives of a Geology cou in the Ontario secondary school curriculum: investigation a study of appropriate teaching methods; procedures and curriculu organization; use and value of maps, equipment, teaching ai books and field exercises for secondary school Geology.

1700 *Seminar in Geology* (4 hours). For Type A candidates Geology. (These candidates are advised to select Geography Science as the other option in the High School Assistants' Progra Type B.) Teaching and discussion of the Geology curriculum; dev opment and analysis of some of the difficult topics by means original research and subsequent reports; experimental treatment the work; field exercises; use of texts, manuals, maps and teachi aids; measurement and evaluation; organization and timing of course of study in Geology and Mineralogy; discussion of appr priate teaching methods and procedures.

59. History

405 *History* (4 hours). A series of lectures and seminars on t following with specific reference to classroom practice:
Survey of history curricula in the schools; principles of course ganization; procedures in course organization; factors in the velopment of effective teaching.
The teacher's philosophy and objectives in teaching history.
A study of the various forms of methodology used in history class evaluation of resources; new approaches to history teaching.
The student of history; motivation; evaluation; dealing with in vidual differences.
Preparation of a unit of a course of study in history.

2300 *History* (4 hours). For Type A candidates in History. A ser of lectures and seminars with emphasis on the practical applicati of the following:
A study of the critical philosophy of history, emphasizing t methods of the historian and the problems of historical knowled a brief survey of the approaches of selected historians and phil ophers to these problems.

Cognitive and affective objectives in teaching history; approaches to the teaching of history such as thematic chronological, problems, enquiry, public issues, concepts and generalizations.
Various forms of methodology.
The planning and organizing of historical materials for presentation by various methods including the treatment of themes, trends and interpretation of material.
Analysis of student difficulties.
Evaluating the effectiveness of teaching and learning.
Preparation of a Teaching Program of a major unit of a course of study.

History, ilosophy, ology of ducation

History, Philosophy, Sociology of Education

Courses offered in Part II, Educational Theory

260 *Comparative Education* (2 hours). The basis of this course is student reading, class presentations, and discussion. The particular countries and topics to be dealt with will depend upon student interest and experience. The initial class discussions will deal with concepts common to education whatever the basis (e.g. liberalism, socialism, communism, nationalism, religion, development, or international cooperation). Students will then proceed to examine topics such as the aims, structure, curriculum, role of teachers, alternative routes, and control of education in various countries and relate these to the social, economic and political systems and their underlying assumptions and ideologies. By comparing the educational patterns of several countries, including Canada, students can gain a deeper insight into education.

261 *Experience and Education* (4 hours). A course designed to explore the relationship between theory and practice by trying to put theory into practice. The course will involve a short initial period of lectures and seminars when various theoretical positions will be presented and discussed. Following this, students will select areas of study which should take them out of The College and into other social institutions. It is anticipated that students will select topics which involve such dilemmas as school community relationships, interdisciplinary approaches to education, Canadian issues in education, student-teacher relationships, morality and the drug culture, and so on. The final weeks of the course will involve a consideration and evaluation of the work undertaken and the method adopted.

262 *Modern Philosophy and Education* (2 hours). A course dealing with such key problems as human freedom, coercion in the classroom, the problem of absurdity, social philosophy and educational theory, approaches to student-centred education, and the influence of modern philosophy on aims and methodology in education. Selected modern philosophical works will be examined. Students are

encouraged to consider conflicting viewpoints and develop their positions.

263 *Progressive Education in Theory and Practice* (2 hours). offered in 1972–73.

264 *School and Society* (2 hours). A course involving a cons ation of such problems as socio-cultural influences on educati achievement, value conflicts (between generations and among s economic classes), and the conflicting functions of the school a institution for transmitting the cultural heritage as well as crit ing it. An analysis of these problems will uncover such issue current concern to schools and teachers as the generation gap, cational control, student power.

265 *Sociology of Education* (2 hours). An examination of school as an institution in the society which it serves. Topics include the structure of society and education, education and s change, education and social mobility, the socialization of the c the social role of the teacher, the influence of economic political forces on education, education and the values of the c munity and the nation, education and international relations. Stud will be expected to relate the principles discussed to their communities. Previous university work in sociology is desira

266 *Values in Education* (2 hours). An examination of sele topics in value theory seen within the educational context. Exam of possible topics: authority and freedom; perception and judgr in education and the arts; the aims of education; valuational im of the mass media; the teacher and the new morality; expres representation, and value formation; technology and counter ture; conceptual analysis of the educatonal environment. No fo background in philosophy is required.

267 *Individual Research Project* (2 hours). Highly qualified dents who wish to engage in an individual research topic r receive the approval of the Department at College registration. privilege of submitting an Individual Research Project is not c to extramural candidates.

268 *Authority and Freedom in School* (4 hours). Can an idea individual freedom be supported? Can authority be justified? D the ideal of individual freedom preclude the exercise of autho Should the school enforce a prevailing moral code? Can a sc be amoral? Is "compulsory education" a contradiction? Why bo being ethical? This course will attempt to get at the roots of hu ethical valuing and thereby illumine, and confront one with, moral dimension of the school.

269 *Issues in the History of Canadian Education* (2 hours) course designed to survey patterns and developments in Cana education from the Indian cultures to the present. Particular at

tion will be paid to the relationship of social changes in, for example, family life, concepts of childhood, living conditions, English-French relations, and the role of religion, to educational systems. Students will have an opportunity to examine original sources.

270 *Cross-Cultural Education* (2 hours). An interdisciplinary examination (from perspectives such as history, psychology, sociology, philosophy, and program development) of the educational issues, problems, and processes encountered in a pluralistic society. The course will focus upon education in relation to poverty, ethnic groups, and counter-culture. Sample issues to be dealt with are: assimilation and integration, the role of religion in education, value conflicts and discipline, mental health, prejudice and discrimination, curriculum design, open-structured and 'free' schools.

Courses offered in Part IV, Additional Related Courses

111 *History of Education: A Reading-Discussion Course* (2 hours). Not offered in 1972–73.

134 *Philosophy and Education in the Classical World* (2 hours). Selected topics in classical philosophy and education treated in historical perspective. Attention will be given to the contemporary significance of classical thought. A background in classics, ancient history, or philosophy may be helpful but is not required. All works studied will be in translation.

135 *Jean-Paul Sartre and Education* (2 hours). An in-depth study of Sartre's *Being and Nothingness* with a view to exploring the implications of his thesis re human freedom for education. This is a seminar course and students should have some acquaintance with the work of Sartre or with existentialism in general.

136 *Problems in Canadian Education* (2 hours). A reading-discussion course where students will select for individual study a particular problem or theme in the history of Canadian education. For example: technical and vocational education, the kindergarten movement, progressive education, ethnic groups and assimilation, urbanization, rural problems, the role of the state, or the changes that have taken place in the aims and content of certain school subject areas such as health education, physical education, history, literature, the mathematics or the sciences.

. Home onomics

410 *Home Economics* (8 hours). For Intermediate and Type A candidates. Development, present trends, values and aims of Home Economics in Ontario schools with emphasis on the growth of personal and professional philosophy.
New concepts of curriculum and teaching emphasizing flexibility and recognition of individual differences.

Creation and function of objectives and evaluation procedure the learning-teaching process with implications for planning.

2500 *Seminars in Home Economics* (2 hours). For Type A c dates in Home Economics. A study of Home Economics educ as it relates to the Canadian family, the individual and the envi ment, with emphasis on readings in current literature and di sions. Students will become familiar with resource materials, the work of outstanding leaders in the field and will devel strong philosophy for potential leadership.

Course offered in Part IV, Additional Related Courses

144 *Child Study in Home Economics* (2 credit hours). Not of in 1972–73.

62. Industrial Arts

415 *Industrial Arts* (8 hours). A course which gives credit Part I of the two-part sequence leading to the Elementary Ce cate in Industrial Arts. The course consists of two types of ex ence. The first type includes lectures and laboratory experienc material science, design technology, environmental design, fab tion and production. Problems are presented to develop cre abilities, experimentation, and the required hand and machine s to work with a variety of materials and processes. Factors con ling the design and planning of objects in the man-made envi ments are studied and applied in practical work.
The second type includes methods of instruction in Industrial and practice teaching.

Courses offered in Part IV, Additional Related Courses

130 *Art and Crafts for Elementary Schools* (See Section 43).
114 *Design Education* (2 credit hours). (See section 49).
113 *Introduction to Vocational, Occupational, and Industrial Education* (2 hours). Types of certificates, the admission req ments, history, philosophy, and the means of realizing the aim these three types of education.
139 *English: Rhetoric and Semantics* (2 hours).

RHETORIC

Methods and patterns of clear and effective writing; relation between thinking and the composition process; perceptive see rhetorical considerations in the composition of sentences, p graphs, and essays; characteristics and techniques of effective i tification, definition, comparison and contrast, classification, illustration; three types of analysis, functional, process, and ca

SEMANTICS

Representative subjects of investigation: codes and levels of spe problems with definitions; relationship between abstraction, thou and action; the uses of language – both verbal and non-verb

in popular culture, advertising, mass media, news gathering, religion and prayer, science, and education.

stitute of ld Study

Course offered in Part IV, Additional Related Courses

001 *Principles and Practices of Child Study* (2 hours). A consideration of general principles of physical, motor, cognitive, emotional, social and personality development and ways of identifying, implementing and evaluating those practices which support this development. Emphasis will be placed on examining methods and procedures used by parents and teachers in the socialization and education of children from infancy through adolescence.

atin and Greek

425 *Latin*, 400 *Greek* (5 hours each language). An examination of mehods in various aspects of the teaching of Latin and Greek, including: oral reading of prose (Caesar, Livy, Nepos) and poetry (Virgil, Ovid); morphology; grammar and syntax; derivation; audio-visual aids and interest devices; historical background of prescribed authors.

Seminar in Classics (2 hours). For Type A candidates in Latin 2900, Greek 2100, or in combination with another Type A subject. An examination of methods applicable to the prescribed courses in Grade 13 Latin and Greek authors for the current year involving a study of adequate translation and of literary appreciation of the prescribed passages; the philosophy of Horace; hexameter, elegiac, sapphic and alcaic metres.

matics

430 *Mathematics* (5 hours). A consideration of the place of mathematics in elementary and secondary education; objectives of the mathematics teacher.

Classroom procedures and teaching methods, Grade 1 through Grade 12, of a balanced student-centred teaching program including methods designed to obtain maximum student involvement in the discovery and development of mathematical concepts and techniques; individual, small group, and large group methods; team teaching involving curriculum planning and execution as a team effort; laboratory techniques; use of multi-media, audio-visual materials, calculators, models and other instructional materials; interdisciplinary approaches, environmental studies; use of the mathematics workshop to promote understanding and confidence, and develop powers of enquiry and creativity; seminar methods; use of socratic discussion; research; testing and evaluation.

The implications for the elementary and secondary schools of contemporary trends in mathematics education; history and development of mathematics; foundations of algebra and geometry; fundamental concepts of logic; applications of mathematics.

3100 *Seminar in Mathematics* (4 hours). For Type A candidates in Mathematics.

A consideration of the development of curriculum for the ele tary and secondary school mathematics programs from kinderg through Grade 13; the responsibilities of departmental admin tion and professional leadership.

Courses offered in Part IV, Additional Related Courses

123 *Research Project in Mathematics Education* (2 hours study in depth of a selected problem in mathematics educ involving a combination of seminar, laboratory work and experience. This study is intended for students who are prin interested in the teaching of mathematics. Enrolment is limite

66. University of Toronto Course in Mathematics

101 *Mathematics* (2 credit hours). An introduction to h mathematics including a study of some secondary school t from an advanced point of view. This course is open to stu having at least 12 credits in university mathematics.

NOTE: This course in Mathematics is offered to provide parti background pertinent to the teaching of secondary school m matics. This course carries 3 credits toward qualification fo dorsement of the High School Assistant's Certificate, Type B for the Type A Certificate. Mathematics 101 may be taken Additional Related Course.

67. Modern Languages: French, German, Italian, Russian, Spanish

Modern Languages (5 hours per language). French 380, Ge 395, Italian 420, Russian 460, Spanish 475.

METHODOLOGY:
Current aims; specific objectives at secondary and primary l curricula; materials.
Procedures; specific techniques in audiolingual presentation written language; vocabulary acquisition; inductive approac language generalizations; teaching literature.
Lesson planning (initial, series, review).
Tests and examinations, both oral and written; administra marking.

APPLIED PHONOLOGY:
Description of the sounds; intonation; accent; discrimination production on the part of the learner; standards of phonemic phonetic accuracy (where pertinent); remedial drills; error c tion by the teacher; counselling techniques and practice.

CONVERSATION:
Free and guided discussions; leadership practice.

LANGUAGE PRACTICE:
Current usage, emphasizing the spoken language; laboratory with pedagogical bias; testing program. (Additional laboratory may be required of those in need of remedial work.)
(a) *Seminar in Modern Languages* (2 hours). For Type A c

Spanish 5300, whether chosen as a single Type A subject or combined with another Type A subject. Study in depth at all levels, as outlined in the Courses of Study and Curricula issued by the Department of Education; stress on methods of presenting work at the Grade 13 level.

(b) *Seminar in Modern Languages* (2 additional hours). For Type A candidates in *French* 1300, *German* 1900, *Italian* 2700, *Russian* 4700, *Spanish* 5300, when *not* combined with another Type A subject. Selected topics, such as linguistics, learning theory and teaching practice, curriculum, culture, reference works, resource materials, textual research, preparation of teaching modules.

Courses offered in Part IV, Additional Related Courses

102 *Applied Linguistics* (2 credit hours). Study of different applications of linguistic theories to the teaching of French; special attention to problems of phonemics, morphology, syntax and semantics in connection with the data of structural linguistics. This course is open to any student of French.

129 *Culture and Society as it relates to the teaching of French* (2 hours). Historical, social and regional factors, with emphasis on French Canada. This course, which includes field work in Quebec, is open to any student of French.

103 *Culture and Society in German Language Teaching* (2 hours). Historical, social and regional factors in the teaching of modern German; a laboratory approach. Enrolment is limited.

108 *Electronic Aids to Language Learning* (2 hours). Audio aids including language laboratory; scripting and taping of programs; film and video production; equipment manipulation. This course (which pre-supposes an interest in, but no knowledge of, electronic aids) is open to any student of a Modern Language.

121 *French at the Elementary School Level* (2 hours). French as a second language from the earliest grades of the elementary school; programs; procedures specific to the age level; audio-visual aids.

NOTE: This course may be chosen by:
i a candidate enrolling in Elementary Education Program as well as in French;
ii any candidate proceeding to a Type A certificate in French (alone or in combination with another Type A subject).

. Music, umental 1 of the for the mediate rtificate

436 *Music, Instrumental* (6 hours). This is a practical course emphasizing the individual mastery of instruments and methods of class teaching, and may be taken only in conjunction with Vocal Music.

3500 *Seminar in Music* (3 hours). For Type A candidates in Instrumental Music. An appraisal of current trends at the junior

and senior levels; the materials used; the aims of the teacher. vanced ensemble techniques; original works or arrangements fo ensemble.

69. Music, Vocal Part 1 of the Program for the Intermediate Certificate

438 *Music, Vocal* (5 hours). The musical experience; liste materials; sound exploration; manipulation of sound; symbol music; musical procedures.
Techniques of choral production; conducting; song materials.

3300 *Seminar in Music* (3 hours). For Type A candidate Vocal Music. Comparative studies of current aesthetics and tices; advanced choral techniques; vocal materials; original ch compositions; problems in the developing of aural responsivene varied musical expressions; examination of sound manipula and formal procedures; multi-media presentations.

Course offered in Part IV, Additional Related Courses

137 *Chamber Music* (2 hours). This study will include perf ance as well as listening and analysis. Candidates, preferably and string players, will be required to audition before being acce into the course.

70. Physical and Health Education

440 *Physical and Health Education – Women* (8 hours).
446 *Physical and Health Education – Men* (8 hours).
Part I of the Program for the Intermediate Certificate:
An introductory course in principles and practices of Physical Health Education. Emphasis is placed on methods of teachin physical activities and health materials outlined in the Course Study for the Intermediate Division of the Ontario Departme Education.

442 *Physical and Health Education – Women* (4 hours).
447 *Physical and Health Education – Men* (4 hours).
Part II of the Program for the Intermediate Certificate:
An introduction to the scientific bases of Physical and H Education. The course includes methods and materials for G 11 and 12; scientific principles; historical developments; intro tion to statistical methods; program planning.

443 *Physical and Health Education* – Women (8 hours).
448 *Physical and Health Education* – Men (8 hours).
Program for the Specialist Certificate:
Emphasis is placed on advanced methodology; philosophic scientific principles; organization and administration of all as of Physical and Health Education in the school situation.

3700 *Seminar in Physical and Health Education – Wome* hours).

3900 *Seminar in Physical and Health Education – Men* (8 ho

For Type A candidates in Physical and Health Education.
The Seminar is concerned with: educational concepts relative to Physical and Health Education; scientific principles relative to human movement; organization and administration of all phases of the secondary school Physical and Health Education program; advanced methodology and teaching techniques.

Courses offered in Part IV, Additional Related Courses

105 *Current Health Problems in North American Society* (2 hours). A survey course including lectures and seminars related to such health areas as cardiovascular disease, mental health, air and water pollution, consumer health, drugs, and sex education.

115 *Outdoor Education* (2 hours). An introductory course emphasizing the use of the outdoor environment as an educational media. An interdisciplinary program which includes lectures and seminars and devotes a considerable amount of time to field work.

151 *Affective Learning through Physical Education* (2 hours). Not offered in 1972–73.

Political Science

450 *Political Science* (4 hours). A series of lectures and seminars with specific reference to classroom practice:
A survey of the World Politics and Civics curricula as set out by the Department of Education; methods and materials in the teaching of World Politics and Civics; the content of the World Politics and Civics courses; principles of course construction; examination and evaluation of a variety of approaches to the teaching of World Politics and Civics; motivation; evaluation; dealing with individual differences.
Preparation of a course of study in Economics.

4300 *Political Science* (4 hours). For Type A candidates in Political Science and in Political Science and Economics.
A series of lectures and seminars with emphasis on the practical application of the following:
The nature of Political Science; aims and methods in the teaching of Economics; the content of an Economics course; principles of course construction; the examination of a number of approaches to the teaching of the subject, e.g. those of Fenton, Senesh, Oliver, etc.; evaluation; individual differences.
Preparation of a course of study in World Politics or Civics.

ychology and ociology

455 *Psychology and Sociology* (4 hours). The value and objectives of the secondary school course 'Man in Society'; planning; methods of presenting various areas of the course; demonstrations and discussion of specific techniques; relationship of 'Man in Society' to other secondary school subjects and to Guidance.

Seminar in 4500 *Psychology and* 5100 *Sociology* (2 hours). Type A candidates in Psychology and/or Sociology. The sem concerns itself with objectives, content and teaching method certain areas of the course 'Man in Society'; the role of the spe ist in the secondary school.

73. School Librarianship

465 *School Librarianship* (10 hours). An introductory course potential School Librarians. The following aspects of the Sc Resource Centre will be explored: Collection, including curricu recreational and basic reference materials; Services; Admini tion; Organization of Materials. Seminars for discussion of r rials and student presentations, laboratory periods for practice, lectures constitute the format of the course.

Because of the nature of School Librarianship, enrolment is ited. Each applicant will be required to have a personal inter with a member of the School Librarianship Department as pa the selection process. Candidates accepted for School Librarian should consider selecting course Educational Media 107, as Additional Related Course.

This course in School Librarianship is Part I of a two-part prog leading to the Intermediate Certificate in School Librarian To complete the requirements for the Intermediate Certifica summer session subsequent to one year of successful experi in a school library is required.

OR

466 *School Librarianship* (6 hours). For candidates who hol accredited degree in Library Science. Emphasis will be placed services given by the School Resource Centre, the curriculum velopment function of the Resource Centre, and special rese projects.

Course offered in Part IV, Additional Related Courses

149 *The School Resource Centre and the Subject Teacher* (2 ho The inter-relationship between the subject teacher and the Sc Resource Centre; how the use of resources and services prov by the Resource Centre can contribute to more effective learn Enrolment is limited. This course may not be taken in combina with Courses 465 or 466.

74. Science

470 *Science* (4 hours). The role of Science in elementary secondary education; the aims and objectives of Science educa Science curriculum design; unit planning and lesson plannin study of representative portions of contemporary Science course examination of the various approaches to the teaching of Scie procedure and methods used to obtain maximum student int and participation; recognition of individual student differences use of audio-visual aids in Science teaching; source materials purchase, maintenance and use of equipment; testing and evalua

0300 *Biology* (6 hours) – For Type A candidates in Biology.
0500 *Chemistry* (6 hours) – For Type A candidates in Chemistry.
4100 *Physics* (6 hours) – For Type A candidates in Physics.

Courses 0300, 0500, and 4100 consist of a series of lectures, seminars and laboratory workshops which emphasize the methodology and content of the Intermediate and Senior Divisions in the various branches of Science. The content of Science 470 will also be covered with reference to the specialist teacher in each subject area.

Courses offered in Part IV, Additional Related Courses

109 *Environmental Studies* (2 hours). From the areas of freshwater ecology, terrestrial ecology, soil ecology, environmental pollution, and urban studies, material is selected that can be used to supplement existing programs in schools or to build an interdisciplinary course in Environmental Studies. This course has a science base. Field experience is provided.

140 *Science in the Elementary School* (2 hours). A course of particular interest to Type A candidates in Biology, or Chemistry, or Physics. A study of the science programs currently used in elementary schools; teaching techniques and procedures specific to age level; correlation of Science in the senior elementary grades and the junior secondary grades.

tre Arts

480 *Theatre Arts, Introductory Course. Improvised Drama and Production* (4 hours). An introductory course which concerns itself both with improvisational and scripted drama as well as with theatre production. Through exercises in sense awareness, movement and play-making, possibilities for expanding imagination and conceptual development are explored. The course concerns itself with improvisation as a means of personal development and as a learning technique. It is primarily designed as a beginning course for the teaching of Theatre Arts and constitutes the first part only of the requirements for the Theatre Arts Certificate. Candidates wishing to obtain the Certificate will be required to attend a further summer session.
Because of the nature of Theatre Arts, enrolment is limited. All applicants will be required to have a personal interview with a member of the Theatre Arts Department as part of the selection process.

485 *Theatre Arts, Drama and Communication Arts* (9 hours in addition to regular evening and weekend workshop sessions).
A course dealing with the philosophy and practice of Drama in Education; the purposes of curricular and extra-curricular drama; creative drama; direction; production; study in the imaginative concepts and structures of the aural and visual media; planning developmental programs; mixed media presentations.

This course consists of group projects frequently culminati performance. It is specifically designed for those who wish, i diately upon securing the High School Assistant's Certificate, Ty and the Theatre Arts Certificate, to seek employment as tea of Theatre Arts.
Because of the nature of Theatre Arts, enrolment is limited applicants will be required to have a personal interview w member of the Theatre Arts Department as part of the sele process.

0700 *Seminar in Drama* (2 hours). For Type A candidates in lish and Drama. An individual research project concerning D in Education selected by the candidate in consultation wit Theatre Arts Department.

Course offered in Part IV, Additional Related Courses

147 *Drama in Education* (2 hours). A course designed to acc students in disciplines other than Theatre Arts with the philos of Drama in Education, and the possible applications of the dra approach in other subject areas. The program consists of sem films, demonstrations, multi-media dramatic presentations, ana of teaching-learning strategies. Limited to students not enroll Theatre Arts.

Bachelor of Education Degree Programs Conducted by the Division of University Extension

Bachelor Education Program Graduates One-Year urse prior to 1970

Bachelor of Education Degree Program for graduates of The College of Education who were awarded the High School Assistant's Certificate prior to May, 1970. The Division of Extension, University of Toronto, offers a program in summer and winter sessions which will enable graduates of the one-year College program prior to May, 1970, leading to the Interim High School Assistant's Certificate, Type B, to qualify for the Bachelor of Education Degree.

PROGRAM: A candidate must complete two of the courses in the present one-year program leading to the Bachelor of Education Degree, namely:
a one course selected from a list of offerings in *Part II, Educational Theory,*
b one course selected from a list of offerings in *Part IV, Additional Related Courses.*

NOTE:
i The summer day sessions are of six weeks' duration.
ii The course in each subject will be thirty class hours.
iii A candidate may take one or two courses in winter or summer session.
iv It may be necessary to limit enrolment in certain courses.
v A course will not be offered unless sufficient candidates apply.
vi This program will not be offered after July 1, 1974.

Admission Requirements: A candidate must submit to the Office of Admissions, University of Toronto, proof of:
a graduation from *The College of Education* in a One-Year High School Assistants' program, Type B, prior to May, 1970;
b possession of the Permanent High School Assistant's Certificate.

Enquiry and Application: Division of Extension, University of Toronto, 84 Queen's Park Crescent, Toronto 181.

Bachelor Education Program

Bachelor of Education Degree Program for holders of Ontario permanent basic teaching certificates. The Division of Extension, University of Toronto, offers a program in summer and winter sessions which enables graduates who meet the admission requirements outlined below to qualify for the Bachelor of Education Degree.

PROGRAM: A candidate must complete four of the courses in present one-year program leading to the Bachelor of Educ Degree, namely:

a one course selected from a list of offerings in *Part II, Educat Theory,*

b one course selected from a list of offerings in *Part IV, Addit Related Courses,*

c two additional courses selected from *Part II, Educational Th* or *Part IV, Additional Related Courses.*

NOTE:

i The summer day sessions are of six weeks' duration.

ii The course in each subject will be thirty class hours.

iii A candidate may take one or two courses in winter or sun session.

iv It may be necessary to limit enrolment in certain courses.

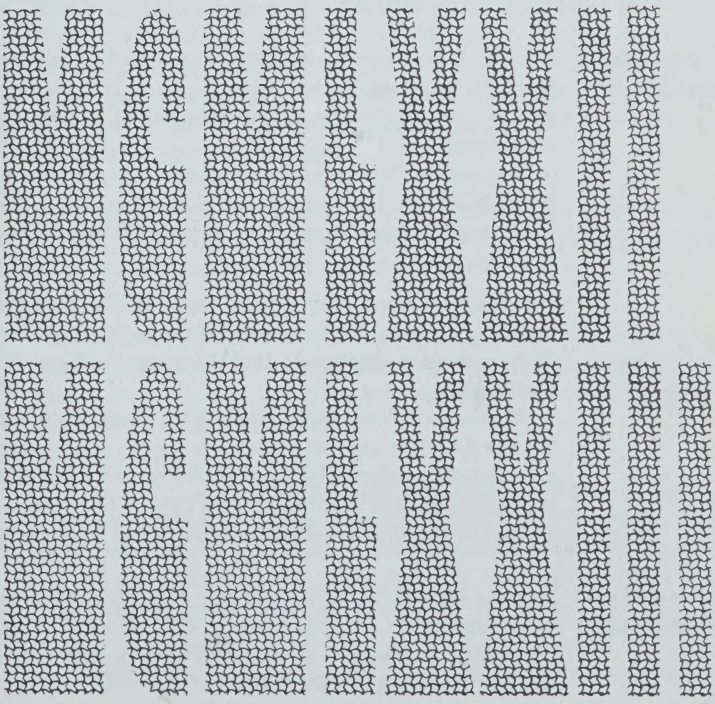
v A course will not be offered unless sufficient candidates app

Admission Requirements: A candidate must submit to the Offi Admissions, University of Toronto, proof that he holds:

a an approved university degree from an accredited university Section 27);

b a permanent basic Ontario teaching certificate.

Enquiry and Application: Division of Extension, Universit Toronto, 84 Queen's Park Crescent, Toronto 181.



One-Year Programs for Certificates in Technic Education and Industrial Arts
(A) Vocational or Occupational Certificates an Bachelor of Education Degree

77. Bachelor of Education Degree and the Interim Vocational Certificate, Type B, or Interim Occupational Certificate, Type B (Practical Subjects)

The degree of Bachelor of Education will be awarded to a stu who holds an approved degree from a recognized university, has the required number of years of wage-earning experience, meets the other admission requirements peculiar to his subject and who also successfully completes the one-year program lea to the Interim Vocational Certificate Type B or the Interim C pational Certificate Type B (Practical Subjects), awarded by Ontario Department of Education. (See also Section 25.)

Other candidates with suitable academic standing and wage-ear experience may enter a One-Year Program leading to an Int Vocational Certificate, Type B, or an Interim Occupational Ce cate, Type B (Practical Subjects), awarded by the Ontario De ment of Education.

78. Vocational Certificates

Interim Vocational Certificate, Type B. The basic certificate i Interim Vocational Certificate, Type B. It qualifies the holde five years as a teacher in the Vocational subject designated o certificate.

A Permanent Vocational Certificate in subject named may b quested of the Department of Education upon the completio two years' successful teaching experience in a secondary scho Ontario.

Interim Vocational Certificate, Type A. The higher certificate i Interim Vocational Certificate, Type A. It qualifies the holde five years as a teacher in the Vocational subject designated o certificate.

A Permanent Vocational Specialist's Certificate may be requ of the Department of Education upon completion of two y successful experience in a secondary school in Ontario in the su designated on the certificate. The Type A Certificate may qualif holder to become a Technical Director in a secondary school.

79. Occupational Certificates

Interim Occupational Certificate, Type B (Practical Subjects). basic certificate is the Interim Occupational Certificate, Ty (Practical Subjects). It qualifies the holder for five years teacher in Occupational subjects.

A Permanent Occupational Certificate (Practical Subjects) may be requested of the Department of Education upon completion of two years' successful experience in a secondary school in Ontario.

Interim Occupational Certificate, Type A. The higher certificate is the Interim Occupational Certificate, Type A. It qualifies the holder for five years as a teacher in Occupational subjects.
A Permanent Occupational Specialist's Certificate may be requested of the Department of Education upon the completion of two years' successful experience in Ontario. The Type A Certificate may qualify the holder to become a Director of an Occupational Department.

30. General onditions of Admission

An applicant for admission to the One-Year Program leading to certificates in Vocational, Occupational, or Industrial Arts must make application, not later than August 16, to the Director of the Department of Technical and Industrial Arts, 371 Bloor Street West, Toronto 181, Ontario, on a form to be obtained from him, and shall submit with the application:

A certificate of birth
If not born in Canada, the candidate must submit a certificate from a competent authority that he is a Canadian citizen or has Landed Immigrant status or has applied for Canadian citizenship. For the Interim Vocational Program, male applicants shall be at least 23 years of age; female applicants shall be at least 21 years of age. This is in accordance with a Department of Education requirement. See the Department of Education Act, 1954, Section 11, (1) (c). A candidate for admission to The College of Education is required to submit evidence of a negative tuberculin test reading or chest x-ray taken within the year preceding September 11, 1972, or to take such a test on admission.

equirements dmission to ram for the m Vocational Certificate, Type B or Interim Occupational Certificate, Type B

To this program may be admitted Applied Science graduates (engineers), graduates of Polytechnical Institutes or Colleges of Applied Arts and Technology, and skilled tradesmen.

Engineers
An applicant shall be the holder of a degree from the Faculty of Applied Science of a recognized university, and shall submit statements to prove not less than two years' subsequent experience in the field of his major subject.

Technologists and Technicians
An applicant shall hold a three-year diploma from an approved program offered by a Polytechnical Institute or College of Applied Arts and Technology, which requires Ontario Grade 12 standing as one of the conditions for admission. He must also document three years of acceptable work experience.

Skilled Tradesmen
An applicant is required to give evidence of a minimum academic

education of Ontario Grade 12, or equivalent, and approved tra
training and experience, generally seven years.
The training or apprenticeship required shall be that demanded
journeyman's qualifications in the trade concerned. Special traini
obtained in an approved day vocational school will be taken in
account in considering the period of training. An applicant sh
submit statements from the persons or firms under whom he w
trained, showing the length of the training period and the nature
the work.
The experience required shall be several years of wage-earni
journeyman trade experience with reputable firms, and shall
such as to show that the applicant is a skilled craftsman, compet
in the main branches of the trade concerned, and familiar with
recent development. The length of the journeyman experien
depends upon the nature of the trade. Documentary evidence
experience in the trade in approved shops shall be furnished
the applicant.
An applicant for the Interim Occupational Certificate, Type
(Practical Subjects), shall furnish proof of wage-earning experien
over at least seven years and involving at least three trade areas.
In calculating the total years of wage-earning experience and/
training, only those years subsequent to the date of the high
academic attainment used in the calculation can be credited unl
the academic program of the candidate was interrupted for a nu
ber of years during which he was engaged in such wage-earni
activity.

NOTES:
1 In all cases the name of the degree, diploma, or apprenticesh
must correspond with both the nature of the wage-earning experien
and the subject to be taught.
2 A minimum of two years of Canadian wage-earning experien
is required.
3 Beginning September 1, 1971, successful completion of the pra
tical portion of the Technical Proficiency Examination has been
quired. This is a performance test.

82. Requirements for Admission to the Program for the Interim Vocational Certificate in Home Economics

To this program may be admitted graduates with satisfactory sta
ing in a three-year Secondary School Home Economics teachi
option of a polytechnical institute or equivalent. Wage-earni
experience is not a prerequisite for admission to this progra
Because of the nature of this program, enrolment may be limit

NOTES:
1 Home Economics is offered in the One-Year Program only.
2 Applicants should pay particular attention to the fact that
Vocational Type A Certificate is offered in Home Economics.
candidates must obtain an acceptable B.A. degree before they a

eligible to proceed to higher certification through the High School Assistants' Program.

quirements mission to ie Program the Interim Vocational ccupational Certificate, Type A

This program is offered to graduates of a Faculty of Applied Science or a Faculty of Architecture or graduates holding the B.SC.N. from a recognized university, with at least 70% or B, whichever is higher, in the final and one other year.

Each candidate shall:

1 submit evidence of not less than two years of approved wage-earning experience in the field of his major subject;

2 be required to take the courses of the Program for the Type B Certificate, and to obtain a grading of 70% or B, whichever is higher;

3 take additional courses in the organization, administration, and supervision of vocational schools, educational measurements, curriculum development, comparative education, and philosophy of education.

Program for the Interim ocational or ccupational Certificate, Type B

The program consists of five parts:

Part I Teaching Subjects
Part II Educational Theory
Part III Professional Practice
Part IV Additional Related Courses
Part V Technical Proficiency Examination.

Part I Teaching Subjects

Teaching Subjects

All candidates will take the following courses:
Methods of Teaching the Technical and Industrial Arts 702
Principles and Practices of Technical and Occupational Education 703

Part II Educational Theory

Educational Theory

All candidates will take the following courses:
Structural and Legal Bases of the Ontario School System 201
Educational Psychology as it applies to Technical Education 706
History and Philosophy of Technical Education 708
Curriculum Development for Technical and Occupational Subjects 701

Part III Professional Practice

Professional Practice 705

Observation and Practice Teaching is a ten-week program. The program is conducted in Ontario secondary schools. Assignment of students to practice schools is made outside as well as within the area of Metropolitan Toronto.

Candidates entering the course must be able and willing to accept practice teaching assignments to those schools selected by the Director and Associate Director of Practice Teaching. Candidates

absent from regular practice teaching weeks will be required make up the assignment at the end of the term.

Part IV Additional Related Courses

Additional Related Courses

a All candidates will take the course
English – For Technical and Occupational candidates 707
b In addition, a candidate must elect one course from the followi
Mathematics 712
Introduction to Special Education 711

Part V Technical Proficiency Examination

Technical Proficiency Examination

Theory 720
Every applicant shall be required to pass a written examina designed to test his attainments as a skilled worker in the sub concerned. The examination shall be on the fundamental princi operations, processes, and skills of the subject.

85. Program of Studies One-Year Session Leading to the Bachelor of Education Degree

Program of Studies, One-Year Session leading to the Bachelor of Education Degree

To this program may be admitted a candidate who holds an appro degree in engineering, architecture, nursing, arts or science fro recognized university. Successful candidates with Canadian citi ship or Landed Immigrant status will be recommended to Ontario Department of Education for the Interim Vocational C ficate, Type B, or the Interim Occupational Certificate, Typ (Practical Subjects).

The program consists of five parts:

Part I Teaching Subjects

Teaching Subjects

As in Part I, Section 84.

Part II Educational Theory

Educational Theory

a All candidates will take the courses
Structural and Legal Bases of the Ontario School System 201
Curriculum Development in Technical and Occupational Subj 701

b In addition, a candidate must elect two courses from those offe by two departments as shown in Part II (b), Section 30.

Part III Professional Practice

Professional Practice

As in Part III, Section 84.

Part IV Additional Related Courses

Additional Related Courses

These courses offer a candidate the opportunity to concentrate ther on one of his teaching subjects by taking a related course

to pursue an interest in another teaching subject or in the field of general education.
A candidate must elect one course from Part IV, Section 30.

Part V Technical Proficiency Examination

Technical Proficiency Examination

As in Part V, Section 84.

Details of Courses in the Program for the Interi Vocational or Occupational Certificate, Type B

NOTE: In each case, the numeral in brackets indicates the numbe lecture hours per week.

86. Administration and Program Development

201 *The Structural and Legal Bases of the Ontario School Sy.* (1 hour). The organization of provincial and local systems of cation; powers and duties of the various educational authori the Education Acts and Regulations of the Province of Ont A study of H.S.I. Course content will be covered through lect discussion and directed readings.

87. Educational Psychology

706 *Educational Psychology as it applies to Technical Educa* (3 hours). An introductory course designed for teachers of Technical and Industrial Arts. As such, special reference is g to the application of educational psychology to teaching and le ing as applied to practical subjects.
Areas explored include development and adjustment, motiva intelligence and its measurement, and the learning process with s on motor learning. Theoretical approaches are examined in term their practical applications.

88. History and Philosophy of Technical Education

708 *History and Philosophy of Technical Education* (2 hou Designed to acquaint the student with the historical developmer education and the philosophical concepts which underly it. topics are set forth to show the vocation aspects of educati developments from the Ancient World to the present and to re the theories and practices of education as advocated by thinkers as Plato, Comenius, Rousseau, Locke, Pestalozzi, Fe berg, Della Vos, Seath, Dewey and Whitehead.
Stress will be placed on the influence of these philosophers on rent vocational practice so that a proper perspective may be ga as we examine the various facets of general educational practic

89. Teaching Subjects

Teaching Subjects

702 *Methods of Teaching the Technical and Industrial Arts* hours).
An introduction to the methodology of teaching skills, concepts,

habits within technical and industrial arts facilities. The course is highly practical in nature with the overall purpose of fostering creativity, inductive and deductive reasoning, and problem solving. The writing of behavioural objectives, lesson planning, analysis of formal lesson types, and ways of maximizing the effectiveness of individual and small group instruction will be applied in a practice teaching workshop and in micro teaching. Instruction and practice will be given in the preparation of instructional materials, and in methods of testing and evaluating performance.

703 *Principles and Practices of Technical Education* (4 hours). An introduction to the basic philosophy of technical education, relating the concepts and generalizations of technical education to its role in general education; an examination of entering behaviours and learning needs of students; a discussion of the facets of the teaching process emphasizing the most effective and efficient methods. The course will be based on discussions, seminars and lectures.

urriculum velopment Technical- cupational Education

701 *Curriculum Development for Technical-Occupational Education* (2 hours). A course consisting of four separate assignments: Subject Analysis; Course of Study; a Model Shop Plan; Equipment List and Budget.

Subject analysis involving organization of the candidate's teaching subject into blocks and later into practical and theoretical lessons; unit, modular, and cluster courses of study designed to satisfy the needs of today's high school student; emphasis on design and planning of teaching areas; methods of ordering and purchasing supplies and major equipment; drawing up an expendable supply budget and the preparation of sample orders for some major equipment.

Vocational Home Economics

Candidates will be required to take Educational Psychology, English (Rhetoric and Semantics), History and Philosophy of Technical Education, Principles of Teaching, Structural and Legal Bases of the Ontario School System. For details, see Details of Courses for the Interim Vocational Certificate, Type B. (Sections 86–89, 92)

710 *Methods of Teaching Home Economics* (10 hours). Philosophy and Techniques of Teaching: development, present trends, values and aims of Home Economics in Ontario schools with emphasis on the growth of personal and professional philosophy. New concepts of curriculum development and teaching, emphasizing greater flexibility and recognition of objectives and evaluation procedures in the teaching-learning process with implications for planning.

Additional d Courses

707 *English for Technical and Occupational Candidates* (3 hours) *Rhetoric and Semantics* (2 hours)

RHETORIC:
Methods and patterns of clear and effective writing; and relation between thinking and the composition process; perceptive se rhetorical considerations in the composition of sentences, p graphs, and essays; characteristics and techniques of effective id fication, definition, comparison and contrast, classification, illustration; three types of analysis: functional, process, and ca

SEMANTICS:
Representative subjects of investigation: codes and levels of spe problems with definitions; relationship between abstraction, tho and action; the uses of language – both verbal and non-verbal popular culture, advertising, mass media, news gathering, reli and prayer, science, and education.

ORAL ENGLISH: (1 hour)
Fundamentals of voice control; oral reading; structure of spe preparation of presentation of formal speeches; presentation impromptu speeches.

Before beginning this course, some formal preparation may advisable for candidates who lack command of basic English st ture and usage.

712 *Mathematics* (2 hours). A course designed to acquaint students with mathematics as taught at the secondary level inclu a *core* of topics involving operations with fractions and decin the solution of linear equalities and inequalities, formulae, r and proportion, powers and roots; *elective* topics chosen f trigonometry, problem solving, the slide rule, estimation and sc tific notation, mathematical structure, relations and graphs, calcu

711 *Introduction to Special Education* (2 hours). A preparation teaching 'non academic' students. It includes Philosophy, Meth ology and Management of the various types of programs in public school system, as well as some Psychology and Me Health relating to slower learners.

713 *Technical Workshop* (2 hours). An opportunity for techn student teachers to broaden and upgrade their knowledge and s in the teaching subject area in which they will be certified an a related teaching subject area.

(B) Industrial Arts Programs

Industrial Certificates

Candidates with suitable academic standing, a basic Ontario teaching certificate, or equivalent, may enter a One-Year Program leading to an Industrial Arts Certificate.

Interim Intermediate Industrial Arts Certificate

The basic certificate is the Interim Intermediate Industrial Arts Certificate. It qualifies the holder for five years as a full-time teacher of Industrial Arts in Divisions up to and including the Senior Division.

A Permanent Intermediate Certificate may be requested of the Department of Education upon completion of two years' successful experience in an elementary or secondary school in Ontario.

Interim Specialist Industrial Arts Certificate

The higher certificate is the Interim Specialist Industrial Arts Certificate which is valid for five years. The holder may ask the Department of Education for a Permanent Specialist Industrial Arts Certificate upon the completion of two years' successful experience in Ontario in Industrial Arts teaching.

94. General Conditions of Admission

General Conditions of Admission

An applicant for admission to the One-Year Program for Certificates in Industrial Arts must make application, not later than August 15, to the Director of the Department of Technical and Industrial Arts, 371 Bloor Street West, Toronto 181, Ontario, on a form to be obtained from him, and shall submit with the application:

A certificate of birth

If not born in Canada, the candidate must submit a certificate from a competent authority that he is a Canadian citizen or has Landed Immigrant status or has applied for Canadian citizenship.

A candidate for admission is required to submit evidence of a negative tuberculin test reading or chest x-ray taken within the year preceding September 11, 1972, or take such a test on admission.

95. Conditions of Admission, the Interim Intermediate Certificate

Candidates with suitable academic standing and an Ontario El mentary, High School Assistant's or Vocational Teaching Certificat or equivalent, may enter a One-Year Program leading to an Indu trial Arts Certificate.

NOTE:

Every teacher of Industrial Arts in an elementary school must ho an Elementary School Teacher's Certificate in addition to his I dustrial Arts Certificate.

If a sufficient number of applicants apply a special half-year cour beginning in January will be offered to those candidates who hav

1 successfully completed Parts I and II of the Elementary Industri Arts Summer Program and Part I of the Industrial Arts Supe visor's Summer Program with a minimum of a B standing in t latter, or

2 successfully completed Parts I, II and III of the Elementa Industrial Arts Summer Program with a minimum of a B standi in Part III, or

3 successfully completed Parts I (seven-week course) and II (seve week course) of the Elementary Industrial Arts Summer Progra with a minimum of a B standing in Part II.

In all cases, candidates who do not have the required B standing a required to complete the full year program leading to the Inte mediate Industrial Arts Certificate.

96. Conditions of Admission, the Interim Specialist Certificate

An applicant shall:

1 hold an Intermediate Certificate in Industrial Arts; and

2 subsequently, have at least one year of successful teaching in t field of Industrial Arts, as verified by the Director of Education the area concerned; and

3 show evidence of having obtained not fewer than seven Gra 13 credits or approved equivalents, including two in English français. It is recommended that the candidate include papers Mathematics and Science.

97. The Interim Intermediate Certificate

The program consists of four parts:

Part I Teaching Subjects
Part II Educational Theory
Part III Professional Practice
Part IV Additional Related Courses

Part I Teaching Subjects

Teaching Subjects

A candidate must elect the following teaching subjects:
Design Technology 640
Design Environment 645
Fabrication and Production 650
Material Science 632

Part II
ducational Theory

Educational Theory
A candidate must elect the following subjects:
Curriculum Development 630
Philosophy 634

Part III
ofessional Practice

Professional Practice 636
Since each candidate enters the program with a teaching certificate, he is given only three weeks in a practice school. His teaching progresses from individual and group instruction to complete charge of routine duties and class instruction. If possible, the candidate is sent to an Industrial Arts room in an elementary school, a junior high school, and a collegiate institute.

Part IV
Additional
d Courses

Additional Related Courses
Candidates at the present time are not required to take subjects from this part.

rogram for
he Interim
Specialist
Certificate

Industrial Arts, Specialist

The program consists of four parts:
Part I Teaching Subjects
Part II Educational Theory
Part III Professional Practice
Part IV Additional Related Courses

Part I
Teaching
Subjects

Teaching Subjects
A candidate must elect three of the following teaching subjects:
Architectural Drawing and Building Construction 660
Communications 661
Electricity Technology 662
Electronics Technology 663
Fabrication and Production (Junior Grades) 664
Foundation Design 665
Mechanics 666
Metal Fabrication and Production 667
Modern Materials 668
Plastics Fabrication and Production 669
Recreational Activities – Crafts 670
Recreational Activities – Outdoor 671
Science Technology 672
Wood Fabrication and Production 673

Part II
ducational Theory

Educational Theory
A candidate must take two courses from this part. He may choose from those courses listed below and those suitable educational theory courses offered by other departments of The College.

Experience and Education 261
Comparative Education 680
Creativity and Problem Solving 681
Curriculum Development 682
Research Techniques 684

Part III Professional Practice

Professional Practice 636

Each candidate is given at least three weeks of practice teachin The program is designed to satisfy the needs and interests of t individual candidate. Experimentation and the use of new metho is encouraged. The candidate is allowed to select the grade level f his practice teaching and, with the cooperation of the associa teacher, is given the opportunity to modify and evaluate the cu riculum. A written assignment is also required.

Part IV Additional Related Courses

Additional Related Courses

Candidates at the present time are not required to take courses fro this part.

Details of Courses in the Programs for the Interim Intermediate Industrial Arts Certificate and the Interim Specialist Industrial Arts Certificate

rmediate

630 *Curriculum Development* (1 hour). A study of the problems involved in developing the program and environment for teaching Industrial Arts. Lecture and Assignment.

640 *Design Technology* (6 hours). Electricity and Electronics: concepts, applications, power mechanics, and central control of electricity; methodology and teaching techniques. Lecture and laboratory. Mechanics: simple machines and applications; fluid power; basic physics as applied to mechanics; methodology and teaching techniques. Lecture and laboratory.

645 *Design Environment* (6 hours). Introduction to basic elements and principles of visual aspects of the environment, and the process of designing, recording and communicating ideas in two and three dimensions; methodology and teaching techniques. Lecture and laboratory.

650 *Fabrication and Production* (12 hours). The development of basic skills in the use of hand tools and machines, and in the handling of materials. Areas of study include the processing of natural and synthetic materials. Problem solving techniques are learned as the acquired skills are applied. Methodology and teaching techniques. Lecture and laboratory.

632 *Material Science* (2 hours). The study of the structure and properties of materials related to sources; production and use. Methodology and teaching techniques. Lecture and laboratory.

634 *Philosophy* (2 hours). Current educational thought: contemporary aims, problems, and practices in education, with particular reference to Industrial Arts education. The general purpose of the course will be to present a philosophical insight to help students appreciate modern educational issues. Lecture and seminar.

pecialist

660 *Architectural Drawing and Building Construction* (4 hours). An experimental approach to structures; a survey of current codes and practices of the construction industry; a study of the materials of construction, their properties and use in modern construction with special attention to their effect upon architectural design; a

group construction problem. Methodology and teaching techniqu Lecture and laboratory.

661 *Communications* (4 hours). Techniques of visual commu cation applied to the design process and teaching methods includi technical drawing, sketching, photography and video. Methodolc and teaching techniques. Lecture and assignment.

662 *Electricity Technology* (4 hours). Theory and test of devi such as motors, relays and solenoid valves. Such devices to be us with various sensors for heat, light, sound, pressure and strain. study of automotive systems. Methodology and teaching techniqu Lecture and laboratory.

663 *Electronics Technology* (4 hours). Semi-conductor thec with experiments and application; the use of experimental kits whi provide suitable classroom problems. Methodology and teachi techniques. Lecture and laboratory.

664 *Fabrication and Production – Junior Grades* (4 hours). dustrial Arts activities for younger children.

665 *Foundation Design* (4 hours). Concerned with the educati of vision through the design process by exploring basic design cc cepts within the limitations of tools, materials and techniqu Methodology and teaching techniques. Lecture and laboratory.

666 *Mechanics* (4 hours). Study and application of power sour and mechanical devices. Methodology and teaching techniques. L ture and laboratory.

667 *Metal Fabrication and Production* (4 hours). Advanc study of metals as materials of construction; metal structur methods of forming, assembly and treatment; tooling for prodi tion; design approaches, and application of theory and princip to a variety of metal fabrication fields. Methodology and teachi techniques. Lecture and laboratory.

668 *Modern Materials* (4 hours). Study of new materials a processes and their application in the Industrial Arts classroo Lecture and laboratory.

669 *Plastics Fabrication and Production* (4 hours). Study of n terial and means of production in greater depth applied to desi fabrication problems. Methodology and teaching techniques. L ture and laboratory.

670 *Recreational Activities – Crafts* (4 hours). Study of cr materials and processes applicable to Industrial Arts teaching. L ture and laboratory.

671 *Recreational Activities – Outdoors* (4 hours). Design, cc struction, and use of equipment related to outdoor recreati Lecture and laboratory.

672 *Science Technology* (4 hours). Scientific principles applied in inventive construction cutting across activity boundaries. Methodology and teaching techniques. Lecture and laboratory.

673 *Wood Fabrication and Production* (4 hours). Advanced problems dealing with forming, fabrication and processing of wood and allied materials; machine methods with an orientation toward design for production on a limited production basis. Methodology and teaching techniques. Lecture and laboratory.

261 *Experience and Education* (4 hours). See section 60.

680 *Comparative Education* (4 hours). An introduction to educational activities in other Canadian provinces and other countries; a comparison of various educational systems. Lecture and assignment.

681 *Creativity and Problem Solving* (4 hours). Psychology of problem solving; Psychology of perception; stages in logical problem solving; system approach; problem solving as an educational strategy; creative technology. Lecture and seminar.

682 *Curriculum Development* (4 hours). The interaction of society and education; current curricular trends in Ontario education; dynamics of curriculum development. Lecture and assignment.

684 *Research Techniques* (4 hours). Introduction to research techniques: purpose and rationale, sources of human knowledge, research and problem solving, e.g. definition of problem, related investigations, hypothesis, design of study, collection and evaluation of data, analysis of data, conclusion, report.

Recommendation of Vocational, Occupational and Industrial Arts Certificates

101. Final Standing

The final standing of students in attendance in the program f Vocational Certificate, Type B, Occupational Certificate, T (Practical Subjects), or programs for the Intermediate and cialist Certificates in Industrial Arts, shall be determined b sessional records of the respective programs. (See Sections 8 97, 98.) The sessional records in each program represent ora written exercises, practical work, research reports, frequent test the results of term and final examinations.

The standing of candidates will be determined by the com results of term work and of the final examinations in the su of Parts I, II and IV, by the examination results of Part V, a the record of Observation and Practice Teaching in Part III.

Standing in the subjects of Parts I, II and IV will be issued a lows: A 80+, B 70–79, C 60–69, D 50–59, F below 50.

A student who obtains 50 per cent of the marks in each c courses in Parts I, II and IV and 50 per cent of the marks ass for Part III and for Part V, if applicable, may be recommend The Council of The College for the Interim Vocational Certi Type B, or the Interim Occupational Certificate, Type B (Pra Subjects) or the Interim Intermediate or Specialist Industria Certificates. Candidates who complete the program under Secti may be recommended also for the Bachelor of Education Deg The Council of The College.

A student who passes in Part III and fails in not more than t the courses included in Parts I, II and IV, may be exempted further attendance, but will be required to take supplemental c inations in the courses failed.

A candidate who fails in a one-year program listed in The C of Education Calendar may be re-admitted in a subsequent with the approval of The Council of The College.

A candidate who withdraws from attendance in any program in The College of Education Calendar may apply for re-adm in a subsequent year on petition to The Council of The Colle

102. Performance Test

A candidate for the Intermediate Industrial Arts Certificate c Specialist Industrial Arts Certificate must pass a performanc before being recommended for a certificate.

chnical ciency iations al and ational

A candidate for the Interim Vocational or Occupational Certificate, Type B, must obtain at least 50% (grade D) in each of the practical and theory portions of the Technical Proficiency Examinations.

mental ations, ls, and Rights udents

A candidate for the Vocational or Occupational Certificate Type B (Practical Subjects) or the Intermediate or Specialist Certificate in Industrial Arts who passes in Part III (Observation and Practice Teaching) and fails with a score not lower than 40% in not more than two subjects of Part I and Part II shall be exempted from further attendance. He may complete his standing for a certificate by re-writing, at an annual examination, the examination(s) in the subject(s) in which he failed. Supplemental examinations will be held in August. If either or both of the two failing scores are lower than 40%, the candidate shall attend one Summer Session in the subject(s) concerned.

It is the responsibility of the student concerned to apply, not later than July 1, for permission to write the supplemental examinations in which standing is desired.

The statement about Appeals and Academic Rights of Students, Section 24, Page 26, also applies to all candidates for Vocational, Occupational, and Industrial Arts Certificates.

lure in an Two ubjects

Candidates who fail in more than two subjects of Part I or Part II or in either division of Part III (Observation and Practice Teaching) shall be required to attend and successfully complete another session as follows:

1 Candidates for Vocational and Occupational Certificates shall attend the January–May session of the One-Year Program or one Summer Session;

2 Candidates for Industrial Arts Certificates who fail in more than two subjects of Parts I or II or in either division of Part III shall attend the January to May session of the One-Year Program.

3 Candidates for the Vocational or Occupational (Practical Subjects) Certificates, Type A, who fail in two or more subjects will be required to repeat the session concerned.

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A candidate who obtains a standing below 50% will attempt a supplemental examination in May, 1973. Candidates who fail to obtain 50% in the supplemental examination will be excluded from further professional training.

A candidate who attends the regular One-Year Program will attempt the theory examination in Technical Proficiency in February, 1973. Supplementals in this subject will be offered in April, 1973.

mission nments

Final marks in any subject or for any Vocational, Occupational or Industrial Arts Certificate may not be issued until all assignments have been completed satisfactorily.

NOTE: As the value of *an endowed scholarship or prize* is depender on the actual income of the fund, it is possible that the value c certain scholarships and prizes at the time of payment may be les than the amount stated in the Calendar.

108. Fellowships

The Province of Ontario Teacher Education Award in the amour of $500 is available to full-time students in the High School Assis tants' and Technical and Industrial Arts Department who are cand dates for Department of Education certificates. No application fo the award is necessary.

109. Ontario Student Awards Program/Canada Student Loans Plan

Ontario Student Awards Program/Canada Student Loans Plan

This Plan, originally instituted by the Federal Government in 196 as a loan scheme, was later combined with provincial grants t provide assistance to supplement the resources of a student and/c the parents where, in the absence of such aid, a student would b unable to pursue a post-secondary education. A student may appl for assistance under this Program for only the funds needed, ove and above those from his own resources and/or those of his family to enable him to continue his studies. The institution to which ap plication is made will inform the student of the amount of ai granted in each case. Part of the assistance granted will be in loa form under The Canada Student Loans Plan. Borrowers under th Plan are required to repay principal and to pay interest, but no pay ments are required so long as the student is in full-time attendanc at an eligible institution and for six months thereafter. Intere charges during this period are paid by the Federal Government wh also guarantees the loan principal. After the interest-free perio repayment of principal and simple interest charges on the outstan ing balance are required in regular monthly payments to the bar from the borrower. The maximum amount which may be advance under this Plan to one student is $1,000 in one academic year. Th maximum total indebtedness allowed under this Plan is $5,000. Application should be made in the first instance to the Registra The College of Education. If assistance is approved, The Colle will first issue a Certificate of Eligibility for the loan portion whi

authorizes the student to make arrangements for the loan with any branch of any chartered bank in Canada. The grant portion of the award is normally paid in the second term.

The William Pakenham ellowship in Education

The late Dr. William Pakenham bequeathed to the University of Toronto the residue of his estate to be used as the governing body of the University may direct on behalf of the activities of The College of Education.

Accordingly, a Fellowship in Education has been established for advanced work either in the University of Toronto or in some other university approved by the Senate. The Fellowship shall be awarded at such intervals and have such value (usually $2,000) as the Senate on the recommendation of The Council of The College of Education may from time to time determine.

Applicants must be residents of Ontario, holding a Bachelor's degree and a teacher's certificate valid in a Canadian province, and must submit a record of professional experience and evidence of ability to make a contribution to education in Canada as a result of further work.

An application form may be obtained from the Registrar, The College of Education. Completed applications must be received by March 15.

. The Paken- ım Memorial Prize

As a memorial to Dr. William Pakenham, Dean of The College of Education from 1907 to 1934, the teachers of Ontario have founded an annual Memorial Prize of the value of the interest on $1,000. The Prize will be in the form of books stamped with the Coat of Arms of the University of Toronto, and will be awarded to the student who obtains the highest standing, as reported in the annual returns of The College, in the subjects of Part I of the High School Assistants' Program, Type B, and in Practice Teaching.

The Hugh W. ın Memorial Prize of The Ontario Secondary ol Teachers' Federation

The Ontario Secondary School Teachers' Federation has founded an annual scholarship of the value of $100 in memory of a former President of the Federation, Dr. Hugh W. Bryan. The prize will be awarded by the Scholarship Committee of the Federation at the close of each session, and after receipt of a report from The Council of The College of Education, to the student in regular attendance throughout the session in the High School Assistants' Program who has shown 'the most outstanding qualities of scholarship, teaching ability, and character.'

The Polymer Corporation holarship in ence and/or Mathematics

The Polymer Corporation Limited of Sarnia, Ontario, has established a scholarship of $750 to increase the supply of teachers qualified to teach Science or Mathematics in secondary schools. The applicant must be a resident of the Province of Ontario who has graduated in the past five years with a degree in Arts or Science

from a Canadian university. The applicant must have Canadian citizenship or have declared intent to obtain this.
Candidates must be prepared to teach Mathematics and/or Science in a secondary school in Canada upon completion of the 1971–72 regular session of The College of Education, University of Toronto. Application forms are available from the Registrar, The College of Education, 371 Bloor Street West, Toronto 181, or from the Secretary, Scholarship Committee, Polymer Corporation Limited, Sarnia, Ontario. Completed applications must be received not later than May 15, by the Secretary, Scholarship Committee, Polymer Corporation Limited.

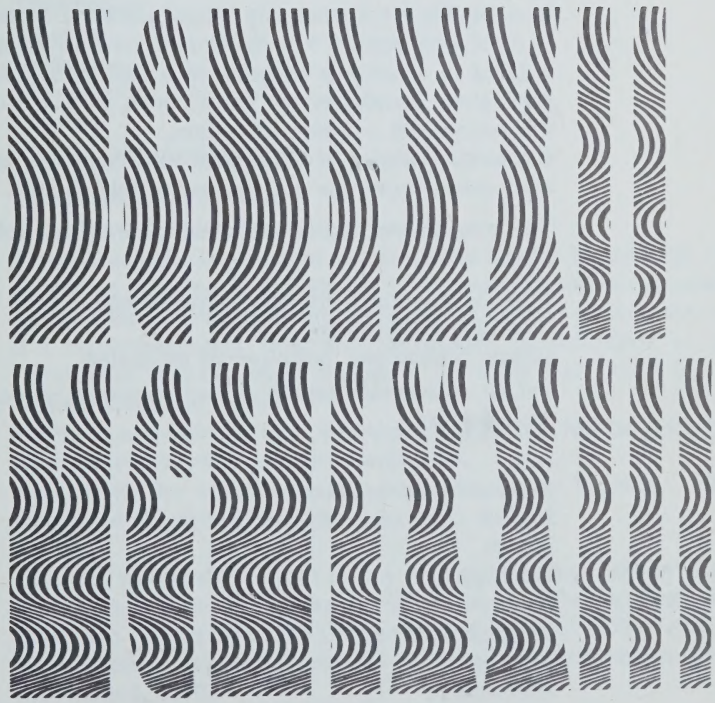
114. The Confederation Life Association Scholarship in Mathematics or Mathematics and Physics

The Confederation Life Association has established a scholarship of $500 to attract honour graduates in Mathematics or in Mathematics and Physics into the teaching profession. The applicant must be a graduate of a Canadian university and must agree to attend the 1972–73 session of The College of Education, University of Toronto, to qualify for a Type A Certificate in Mathematics or Mathematics and Physics.
Application forms are available from the Registrar, The College of Education, 371 Bloor Street West, Toronto 181, or from the Head of the Department of Mathematics or Physics at the student's university.
The completed application forms must be received by the Registrar, The College of Education, University of Toronto, not later than May 15.

University of Toronto Degree Programs of Interest to Teachers

115. Graduate Degrees, Ontario Institute for Studies in Education

Programs of Study leading to University of Toronto graduate degrees of Master of Education, Master of Arts, Master of Philosophy, Doctor of Education and Doctor of Philosophy are available through the Ontario Institute for Studies in Education. Enquiries should be addressed to the Director of Graduate Studies, Ontario Institute for Studies in Education, 252 Bloor Street West, Toronto 181.



116. High School Assistants' Type B Summer Program for Teachers with Professional Education

A summer program leading to the High School Assistant's Certificate, Type B, will be held from July 4 to August 11, 1972.

An applicant will be admitted who:

a holds a university degree approved for admission to the High School Assistants' Type B program,

b i holds an Ontario Interim Elementary School Teacher's Certificate, Standard 4, or

ii holds a Permanent Elementary School Teacher's Certificate Standard 4, and does not have a contract with a secondary school board, or

iii holds an acceptable teaching certificate other than **i** or **ii** above or

iv is eligible for a secondary school Letter of Standing but wishes to familiarize himself with the Ontario school system, or

v failed in a one-year program of a College of Education but has been given permission by The Council of The College to attend this course with a change of options,

c submits evidence of a negative tuberculin test reading or chest x-ray taken within the year preceding July 4, 1972.

The program will consist of offerings from the following Departments:

Administration and Program Development
Educational Psychology
History, Philosophy, Sociology of Education

and an appropriate pattern of two secondary school subjects from the following:

Art
Business and Commerce
English
French
Geography
History
Home Economics
Latin
Mathematics

Physical and Health Education
Science
Theatre Arts

gh School Assistants' Seminars

Summer Seminars leading to the following High School Assistant's Certificates, Type A, alone or in combination, will be offered from July 4 to August 11, 1972:

Biology
Chemistry
*Economics
English
French
Geography
German
Greek
History
*Italian
Latin
Mathematics
*Music
Physical and Health Education
Physics
*Political Science
*Psychology
*Russian
Science
*Sociology
*Spanish

*If sufficient numbers apply.

Admission requirements:

1 a High School Assistant's Certificate,
2 the academic requirement as prescribed in the Department of Education Memorandum 1970–71:51. (Transcripts will be evaluated by the Office of Advanced Standing of The College of Education),
3 a recommendation from the Department of Education as to competence as a classroom teacher of the Type A subject(s) in an Ontario secondary school.

NOTE: If necessary to limit enrolment, preference will be given to candidates who hold Permanent Certificates.

Application for enrolment must be made to the Registrar, The College of Education, not later than April 1, 1972.

Business Education Summer Sessions

Teachers who wish to enrol in any of the following Summer Sessions should write for application forms to the Director, Business Education Department, The College of Education, 371 Bloor Street West, Toronto 181, and should submit the completed form not later than June 1, 1972.

Summer Sessions leading to Part I, Part II and Specialist in Accountancy, Data Processing, Marketing, or Secretarial will be held at Central High School of Commerce, Toronto, for candidates who hold a High School Assistant's Certificate. Candidates with Elementary School Teaching Certificates may also attend the Intermediate courses.

119. Examinations and Supplementals

Examination Centres:

a Examinations in the non-machine subjects will be held on April 22, 1972, at The College of Education and, if sufficient candidates apply, at Thunder Bay, Sault Ste. Marie, North Bay, Ottawa and Windsor only.

b Examinations in the machine subjects will be held on April 29, 1972, at The College of Education and, if sufficient candidates apply, at Thunder Bay, Sault Ste. Marie, North Bay, Ottawa and Windsor only.

Permission to write will be based on the requirements listed below. Requests to write the examinations should be made to the Director, Business Education Department, before March 1, in the year of writing. The timetable of examinations will be mailed to a candidate when his application is accepted.

Supplementals

A candidate who has failed to obtain standing in the Principles and Practices of Teaching a Business Education subject at a previous session may try the supplemental at the end of the Summer Session.

Requirements for writing examinations:

A candidate may write an examination when

a Intermediate Part I or II college correspondence courses have been successfully completed;

OR

b Intermediate Part I or II subjects have been taught by the candidate for two years within the last three years as certified by the Principal;

OR

c Official evidence is presented of the successful completion of Intermediate Part I or II subjects at a night school course, secondary school option course, a business college course, or an approved machine company course.

120. Two-Summer Program Leading to the Commercial-Vocational Certificate, Type B

Commercial-Vocational Courses of a two-summer sequence will be offered at Toronto in 1972, commencing July 4 and ending August 4. These courses lead to the Interim Commercial-Vocational Certificate, Type B. This certificate is valid in any secondary school for teaching only the commercial subjects named on the certificate.

To these five-week courses may be admitted the following:

1 Graduates of an accredited university with standing acceptable

to The College of Education who are not eligible for the High School Assistants' Program. These candidates may qaulify for admission to any one of the courses offered.

2 Graduates of a three-year Secretarial Science Diploma Course at an educational institution whose program is acceptable to The College of Education in content and standards. These candidates may qualify for admission to the Typewriting, Office Practice and Shorthand courses.

Applicants must submit evidence that they have obtained a contract with a secondary school board, or a contract with an inspected private school, to teach the business subjects for which they are certified.

Applicants proceeding toward a Commercial-Vocational Certificate, Type B, may choose one of the following courses:

1 Typewriting and Office Practice

2 Typewriting, Office Practice and Shorthand

The course followed determines the skills or subjects for which the certificate is valid in a secondary school.

Subjects of Certification

Applicants who select the Typewriting and Office Practice course will be certified to teach Typewriting, Grades 9 and 10, and Office Practice. These teachers may also be certified for other related subjects. Teachers who select the Typewriting, Office Practice, and Shorthand courses will be certified to teach these three subjects and may also be certified to teach related subjects. Applicants for any of these courses may be required to try qualifying examinations in the field of their choice at the option of the Admissions Committee. All applications for these courses must be received not later than June 1.

Applicants who are accepted for these courses and who, after one year's successful teaching, complete a second summer course in 1973, will be granted an Interim Commercial-Vocational Certificate, Type B (subjects named), valid for five years. A permanent Commercial-Vocational Certificate (subjects named) may be issued after two years of teaching experience if the quality of the teacher's work has been satisfactory and he has completed eight full courses toward an acceptable university degree. Upon completion of the degree, teachers may apply to the Department of Education for an Interim High School Assistant's Certificate, Type B, and may proceed towards Commercial Specialist status.

Detailed information regarding this course as well as information regarding examinations should be obtained immediately from the Director, Business Education Department, The College of Education, 371 Bloor Street West, Toronto 181, in order that eligibility for admission may be established before a contract is made with a school board.

121. Three-Summer Program Leading to the Commercial-Vocational Certificate, Type B

The first Course of the Three-Summer Program has been discontinued. The second and third Commercial-Vocational Courses of the three-summer sequence will be offered at Toronto in 1972 commencing July 4 and ending August 4. These courses lead to an Interim Commercial-Vocational Certificate, Type B, which is valid in any secondary school for teaching the Commercial subjects named on the certificate. These courses offer preparation in methodology for the subjects of Typewriting, Office Practice, Shorthand, and Marketing. The second and third summers of this program will be offered for those who complete successfully the work of the previous summer courses.

To these courses may be admitted applicants who submit the following:

a an Ontario Secondary School Honour Graduation Diploma or equivalent, and

b a statement satisfactory to The College of Education, from an employer or employers that the applicant has had at least five years acceptable office or merchandising experience. Graduates of the Marketing Management or Retail Administration options of the three-year course at the Ryerson Polytechnical Institute must submit similar statements testifying to at least two years of acceptable merchandising experience subsequent to graduation from the Ryerson Polytechnical Institute, and

c evidence that an applicant has passed the required qualifying examinations in Shorthand, Typewriting, or Marketing, and

d evidence that an applicant has obtained a contract with a secondary school board, or a contract with an inspected private school to teach the business subjects in which he has passed the qualifying examinations.

Applicants proceeding toward a Commercial-Vocational Certificate Type B, may choose one of the following courses:

1 Typewriting and Office Practice

2 Typewriting, Office Practice and Pitman Shorthand

3 Marketing

The course followed determines the skills or subjects for which the certificate is valid in a secondary school.

Subjects of Certification

1 Applicants who select the Typewriting and Office Practice course will be certified to teach Typewriting, Grades 9 and 10, and Office Practice. These teachers may also be certified for other related subjects. Teachers who select the Typewriting, Office Practice, and Shorthand courses will be certified to teach these three subjects and may also be certified to teach related subjects.

2 Applicants who select the Marketing course will be certified to teach Retail Merchandising, Grades 9 and 10, and Marketing Grades 11 and 12, and may be certified to teach related subjects in the marketing field.

If the applicant is successful in the summer courses and in teaching, the employing board will not be required to advertise the position during the teacher's second year of teaching. After the third summer course the successful candidate will receive an Interim Commercial-Vocational Certificate Type B (subjects named). This certificate will be valid for five years. A permanent Commercial-Vocational Certificate (subjects named) may be issued after two years of experience if the quality of the teacher's work has been satisfactory and the teacher has completed eight full courses toward an acceptable university degree. Upon the receipt of this degree, the teacher may apply to the Department of Education for an Interim High School Assistant's Certificate, Type B, and will be eligible to proceed toward Commercial Specialist status.

Detailed information regarding this course as well as information regarding examinations should be obtained immediately from the Director, Business Education Department, The College of Education, 371 Bloor Street West, Toronto 181, in order that eligibility for admission may be established before a contract is made with a school board.

Counsellor Education Summer Sessions

The Program, which consists of four parts (Parts I, II, III, IV), leads to the Guidance Specialist Certificate granted by the Ontario Department of Education, and will be offered by the Counsellor Education Department, July 4 to August 4, 1972.

Admission Requirements:

Part I

1 a certificate qualifying the candidate to teach in an elementary or secondary school in Ontario;

2 evidence of at least one year of successful teaching experience in Ontario, as certified by a superintendent.

Part II

1 successful completion of Part I of the Counsellor Education Program; *or*

2 an Elementary Guidance Certificate.

Part III

1 successful completion of Part II of the Counsellor Education Program; *or*

2 an Intermediate Guidance Certificate.

NOTE: An applicant for Part III must also submit evidence, certified by a superintendent, of having one year of successful teaching experience in Ontario, including at least 180 hours of successful guidance and counselling, following completion of Part II of the Counsellor Education Program.

Part IV

1 Part III of the Counsellor Education Program.

ADVANCED STANDING

Exemption from one or more courses leading to an advanced certificate may be requested upon submission of:

1 transcripts of graduate courses in guidance and/or counselling,

2 evidence of at least one year of successful teaching experience in Ontario, as certified by a superintendent.

LIMITED ENROLMENT

Enrolment is limited. Preference will be given to those with highest qualifications.

Completed application forms must be returned, with necessary documents, not later than April 1, 1972, to the Director, Summer Courses in Counsellor Education, The College of Education, 371 Bloor Street West, Toronto 181, Ontario.

COURSES

Part I, (All Candidates)

Developing Interpersonal Skills 486
Child and Adolescent Development 487
Introduction to Counselling 488

Part II, (for candidates with Kindergarten to Grade 6 responsibilities)

Basic Counselling Practicum 489
Developmental Counselling Services in the Junior School 491
Use and Misuse of Standardized Tests 492

Part II (for candidates with Grades 7 to 13 responsibilities)

Basic Counselling Practicum 493
Career Development and Educational Planning 494
Use and Misuse of Standardized Tests 496

Part III (for candidates with Kindergarten to Grade 6 responsibilities)

The Counsellor and the Community 497
Intermediate Counselling Practicum 498
Group Work in the Junior School 499

Part III (for candidates with Grades 7 to 13 responsibilities)

The Counsellor and the Community 497
Intermediate Counselling Practicum 501
Group Work in Grades 7 to 13 502

Part IV (for candidates with Kindergarten to Grade 6 responsibilities)

Contemporary Issues in Counselling 503
Advanced Counselling Practicum 504
The Counsellor and the Special Needs of the Atypical Junior School Child 506

Part IV (for candidates with Grades 7 to 13 responsibilities)

Contemporary Issues in Counselling 503
Advanced Counselling Practicum 507
Organization and Administration of Counselling Services 508

123. Home Economics Summer Sessions

Part III of the revised program of the summer courses leading to the Intermediate Certificate in Home Economics will be given in 1972, July 4 to August 18. These courses are being discontinued, and only candidates who have completed successfully Part II of the revised program can be admitted to Part III.

Applications for Part III must be submitted not later than April 1, 1972, to the Principal, Home Economics Summer Courses, The College of Education, 371 Bloor Street West, Toronto 181, Ontario.

Seminar leading to the Intermediate Certificate in Home Economics will be given from July 4 to August 11, 1972. Admission requirements are an Elementary School Teacher's Certificate and evidence of successful completion of five university courses in Home Economics with a standing not lower than 60% or C standing, whichever is higher. Beginning in 1974, an admission requirement will be an approved university degree including the required Home Economics courses. Applications to be submitted as in Part III above.

124. Physical and Health Education Summer Sessions

Summer Sessions in Physical and Health Education will be offered in Toronto for men and women.

Intermediate Summer Sessions (Secondary School Teachers)

The program leading to an Intermediate Certificate in Physical and Health Education consists of two Summer Sessions (Intermediate, Parts I and II). These will be held from July 4 to August 11, 1972. Applicants for admission to the Summer Sessions must hold a High School Assistant's Certificate.

Applicants holding an Elementary Physical and Health Education Certificate granted under former regulations may be admitted to the second Summer Session (Intermediate, Part II).

Specialist Summer Session (Secondary School Teachers)

The Summer Session leading to the Specialist Certificate will be held in Toronto from July 4 to August 11, 1972.

Applicants for admission must hold an Interim High School Assistant's Certificate or a Permanent High School Assistant's Certificate and an Intermediate Certificate in Physical and Health Education, and have taught for a period of at least one year in a secondary school in Ontario, or in Grade 9 or 10 of an elementary school or a separate school in Ontario, or hold a High School Assistant's Certificate and a Supervisor's Certificate in Physical and Health Education. *In addition to the above, five university courses in Physical and Health Education, beyond a first university degree, may be required for admission to the Specialist Course in the summer session. This requirement will not be in effect in 1972.*

Applications

Application forms may be obtained from the Head of Women's Physical and Health Education, or from the Head of Men's Physical

and Health Education, The College of Education, 371 Bloor Street West, Toronto 181. Completed application forms must be returned not later than May 1, 1972.

Physical and Health Education Summer Courses for Elementary School Teachers

The following courses leading to the appropriate Department of Education certificates will be offered by the Physical and Health Education Departments (Men and Women), July 4 to August 4, 1972:

1 *Elementary, Type B.* Admission requirement: a certificate or Letter of Standing qualifying the applicant to teach in an elementary school in Ontario.

2 *Intermediate, Type B, Part I.* Admission requirement: completion of the Elementary, Type B course or its equivalent.

3 *Intermediate, Type B, Part II.* Admission requirement: completion of Part I of the Intermediate, Type B course.

4 *Supervisor's Course.* Admission requirement: an Intermediate Certificate in Physical and Health Education, Type B, and at least five years' approved teaching experience.

Further information and application forms may be obtained from the Chairman, Physical and Health Education Department, The College of Education, 371 Bloor Street West, Toronto 181.

Medical Certificates

Each applicant is required to forward by June 15 a medical certificate from his own physician indicating that he is physically fit to take a Summer Session in Physical and Health Education. Applications will not be given final acceptance until this condition has been fulfilled.

125. School Librarianship Summer Sessions

Three six-week Summer Sessions lead to the Specialist Certificate in School Librarianship. The first and second Summer Sessions, Parts I and II, lead to the Intermediate Certificate in School Librarianship. The third Summer Session leads to the Specialist Certificate in School Librarianship. The three sessions, which must be taken consecutively, are offered to meet the greatest need; hence all three are not offered every summer, nor consecutively.

Intermediate, Part I

The Program will be offered in Toronto from July 4 to August 11, 1972.

Admission requirements:

1 a High School Assistant's Certificate,

2 evidence of at least one year of successful teaching experience in an Ontario secondary or junior high school.

Application forms may be obtained from the Chairman, School Librarianship Department, The College of Education, 371 Bloor

Street West, Toronto 181. Application must be submitted not later than May 1, 1972.

Theatre Arts Summer Session

481 *Theatre Arts: Drama and Communication Arts*

The second part of a two-course program leading to the Theatre Arts Certificate. The course concerns itself with the purposes of curricular and extra-curricular drama, direction, production, study in the imaginative concepts and structures of the aural and visual media, planning developmental programs, mixed-media dramatic presentations.

The course consists of group projects frequently culminating in performance.

Prerequisite: 480 *Theatre Arts: Improvised Drama and Production* or another course acceptable to the Theatre Arts Department.

7. Vocational and Occupational Summer Sessions

Vocational/Occupational (Practical) Type B, Summer Program for Teachers with Professional Education

A summer session leading to the Interim Vocational or Occupational (Practical) Certificate Type B will be offered from July 4 to August 18, 1972, at Toronto only, for holders of a Permanent High School Assistant's Certificate, or of equivalent qualifications meeting Department of Education requirements for Vocational Certification and who have an assignment to teach a vocational-technical course.

The program consists of three parts:

Part I – *Teaching Subjects*
All candidates will take selected topics from the courses:
Principles and Practices of Technical Education 703
Methods of Teaching the Technical and Industrial Arts 702

Part II – *Educational Theory*
Structural and Legal Bases of the Ontario School System 201
Educational Psychology as it applies to Technical Education 706
Curriculum Development for Technical Subjects 701

Part III – *Technical Proficiency Examination*
Theory 720
Every applicant shall be required to pass written and practical examinations designed to test his attainments as a skilled worker in the subject concerned. The examinations shall be on the fundamental principles, operations, processes, and skills of the subject.

Vocational/Occupational (Practical) Type B, Summer Program for Teachers without Professional Education

The Initial seven-week summer session leading to the Interim Vocational or Occupational (Practical Subjects) Certificates, Type B, has been discontinued.

There will be Completing seven-week programs from July 4 to

August 18, 1972, leading to an Interim Vocational Certificate, Type B, or an Interim Occupational (Practical Subjects) Certificate, Type B.

Eligibility:

These programs will be available to candidates who have completed successfully the initial seven-week summer program of 1971 or earlier, have taught satisfactorily during a complete school year on a Temporary Secondary School Certificate and have been recommended by the principal and the director of education concerned, and have completed both parts of the Technical Proficiency examination.

Candidates will attend the Completing Session in the same centre in which they were in attendance at the Initial Session in 1971.

The program consists of three parts:

Part I – *Teaching Subject*
Principles and Practices of Technical Education 703
Part II – *Educational Theory*
Structural and Legal Bases of the Ontario School System 201
History of Technical Education 708
Curriculum Development for Technical Subjects 701
Part III – *Additional Related Course*
English: Rhetoric and Semantics 139

Interim Vocational Type A Certificate

A Program leading to the Interim Vocational Certificate Type A will be offered in summer sessions from July 4 to August 4, 1972.

Eligibility:

This program is open to a candidate who:
holds a Permanent Vocational Certificate Type B; submits a statement from the director of education concerned that he has taught satisfactorily for at least two years; and meets the academic requirements outlined in the Department of Education memorandum 1967-68:30. A copy of this memorandum is available from The College of Education.

The completing session will be open to a candidate who:
obtains standing in the initial session; or holds an approved four-year degree in Applied Science (B.SC., or B.A.SC.), Architecture (B.ARCH.) or Nursing (B.SC.N.), and an Interim Vocational Certificate Type B, and who submits a statement from the director of education concerned that he has taught satisfactorily for a minimum of one year.

NOTE: A candidate in the latter category will take a special program

Program of Studies:

A candidate who is admitted for the first time in 1972, will complete six courses consisting of four Professional Development courses and two Technological or equivalent courses. (See below.)

A candidate enrolled in the completing summer session will follow the program in effect prior to 1972.

Interim Occupational Type A Certificate (Practical Subjects)

The initial and completing summer sessions leading to the Interim Occupational Certificate Type A (Practical subjects) will be offered from July 4 to August 4, 1972.

Eligibility:

The initial summer session will be open to a candidate who: holds a Permanent Occupational Certificate Type B (Practical Subjects); submits a statement from the director of education concerned that he has taught satisfactorily for at least two years; and meets the academic requirements outlined in Department of Education memorandum 1967–68:30. A copy of this memorandum is available from The College of Education.
The completing session will be open to a candidate who obtains standing in the initial session.

Details of Courses in the Summer Programs for the Vocational and Occupational Certificates, Type A

Vocational Type A Courses: 750, 751, 752, 753, 758, 759
Occupational Type A Courses: 750, 753, 755, 756, 757, 758, 794, 795

Professional Development Courses

750 *Comparative Education*
An introduction to education in other Canadian provinces and other countries, providing a framework for comparison with the Ontario system. An examination of the similarities and differences currently exhibited by the educational systems in Canada, the United States, the United Kingdom and Russia will focus on such major topics as tradition, social change, resources, constitutions, nationalism, selection of elites, urbanization and technology.

751 *Curriculum Development*
An examination of the theory of curriculum development in the field of vocational education through an analysis of individual and group behaviour, using Getzels' social role model as a basis for the study, and the effects upon the schools of current plans for curriculum development by local groups and the Department of Education. Topics include definitions of curriculum, influences affecting curriculum designs, and evaluation of curriculum.

752 *Test Construction and Educational Measurement*
The first part of this course provides opportunities for teachers to practice construction of valid and reliable testing instruments, for use in classroom practice. The second part uses basic statistical techniques to clarify and evaluate results obtained in classroom test situations.

753 *Philosophy of Education*
An attempt to answer the question "What are the proper aims of education?" by examining the basic metaphysical, moral and political issues through a study of selected readings by such thinkers as Plato, Locke, Rousseau, Kant, Dewey, Whitehead, Russell, Maritain and Hook.

755 *Problems in Special Education*
An exploration of the origin of and solutions for philosophical attitudes and managerial methods contributing to school oriented problems peculiar to the practical subject areas of the school system. Discussion topics are largely based upon experiences provided by class members.

756 *Society and the School*
An exploration of the role of the school as an agent of modern society and its functions in the development of youth based on the interaction of varying cultures, moral standards and attitudes of different culture and socio-economic groups.

757 *Mental Health and Hygiene*
A course based on the premise that sound mental health is necessary to successful progress in education. A study will be made of the effects on the learning processes of students by factors such as behavior mechanisms, social influences on personality and adjustments to varied situations.

758 *Supervision*
An introductory course for teachers who wish to acquire a greater awareness of the characteristics, skills and trends of supervisory relationships. Leadership, human relations, individual and group behaviour, organizational goals, efficiency, and communication will be discussed.

759 *Administration*
A study of the administrative functions within the secondary school system of Ontario. School administration, organization, timetabling, problem solving, decision making, as well as personnel selection, development and effectiveness will be discussed.

794 *Special Education I*

795 *Special Education II*

Technological Courses

The following technological courses are offered to Vocational Type A and Occupational Type A candidates.

Electrical and Electronics I 770
Electrical and Electronics II 771
Fashion and Design I 772
Fashion and Design II 773
Fluid Power I 774
Fluid Power II 775
Fluid Power III 776
Graphic Arts I 777
Graphic Arts II 778
Mathematics I 779
Mathematics II 780
Mechanical Technology and Engineering Science I 781
Machine Tool and Workshop Technology II 782
Thermal Engineering II 783
Advanced Welding II 784
Machine Design II 785
Engineering Graphics II 786
Vocational Art I 787
Vocational Art II 788
Wood Technology I 789
Wood Technology II 790
Wood Technology III 791
Special Education I 794
Special Education II 795

NOTE:
Applications must be received not later than June 1, 1972, for any Vocational or Occupational Summer Session mentioned above. Application should be made to the Director, Technical and Industrial Arts Department, The College of Education, 371 Bloor Street West, Toronto 181.

8. Industrial rts Summer Sessions

Programs leading to Industrial Arts Certificates
Elementary Certificate

Part I and Part II of the two-summer program leading to the Elementary Industrial Arts Certificate will be offered from July 4 to August 18, 1972.

Intermediate Certificate

Part II of the three-summer program leading to the Interim Intermediate Industrial Arts Certificate will be offered from July 4 to August 4, 1972.

Specialist Certificate

Part I, Part II, and Part III of the three-summer program leading to the Interim Specialist Industrial Arts Certificate will be offered from July 4 to August 4, 1972.

129. Conditions of Admission, the Elementary Certificate

To Part I may be admitted a teacher who holds a certificate or a Letter of Standing qualifying him to teach in an elementary or secondary school in Ontario.

To Part II may be admitted a candidate who has successfully completed Part I.

130. Elementary Certificate

The program consists of two parts:

Part I

Design Technology I 600
Design Environment I 602
Fabrication and Production I 604
Material Science I 606
Curriculum Development I 608
Philosophy I 610
Administration I 612

Part II

Design Technology II 601
Design Environment II 603
Fabrication and Production II 605
Material Science II 607
Curriculum Development II 609
Philosophy II 611
Administration II 613

131. Conditions of Admission, Intermediate Certificate

To Part II may be admitted a candidate who has successfully completed either Part I of the Intermediate program or who holds an Interim Supervisor's Industrial Arts Certificate.

NOTE: Part II is being offered in 1972 for the last time.

Candidates will be able to complete requirements for the Interim Intermediate Industrial Arts Certificate through the summer program according to the following schedule:

YEAR	COURSE OFFERED
1972	Part II
1973	Part III

132. Intermediate Certificate

Intermediate Certificate

Part II

Curriculum Development 630
Design Technology 640
Design Environment 645
Fabrication and Production 650
Material Science 632

3. Conditions of Admission, Specialist Certificate

To Part I may be admitted a candidate who:

a holds an Interim Intermediate Industrial Arts Certificate with an average of B standing in the Intermediate Industrial Arts Program, and

b has taught Industrial Arts successfully for one year subsequent to obtaining the Intermediate Certificate as confirmed by the Area or Municipal Director or Superintendent concerned, and

c has seven Grade 13 credits (two of which shall be English or Francais) or equivalent as approved by The College of Education.

To Part II may be admitted a candidate who has passed Part I.

To Part III may be admitted a candidate who has passed Part II.

4. Specialist Certificate

Specialist Certificate

Part I

Creativity and Problem Solving 681

A candidate must successfully complete one of the following optional subjects:

Architectural Drawing and Building Construction 660
Communications 661
Electricity Technology 662
Electronics Technology 663
Fabrication and Production – Junior Grades 664
Foundation Design 665
Mechanics 666
Metal Fabrication and Production 667
Modern Materials 668
Plastics Fabrication and Production 669
Recreational Activities – Crafts 670
Recreational Activities – Outdoors 671
Science Technology 672
Wood Fabrication and Production 673

Part II

Curriculum Development 682
Research Techniques 684

Candidates must successfully complete one of the optional subjects listed in Part I. The subject must be one different from that completed in Part I.

Part III

Comparative Education 680
Curriculum Development 682

Candidates must successfully complete one of the optional subjects listed in Part I. The subject must be one different from those completed in Part I and II.

135. Details of Courses in the Summer Programs for the Industrial Arts Certificates

Elementary

600 *Design Technology 1*
Electricity: Introduction to sources characteristics, measurement, and control of electricity; methodology and teaching techniques. Lecture and laboratory.
Mechanics: An introduction to the sources, transfer, and control of power; methodology and teaching techniques. Lecture and laboratory.

601 *Design Technology 2*
Electricity: Application of electrical principles in home, school, and industry; methodology and teaching techniques. Lecture and laboratory.
Mechanics: Application of mechanical principles through problem solving; methodology and teaching techniques. Lecture and laboratory.

602 *Design Environment 1*
Design foundation: structural basis of form – line, plane, mass; methodology and teaching techniques. Lecture and laboratory.
Communication: descriptive drawing, sketching, and photography as a means of observation; recording and communication of individual perceptions; methodology and teaching techniques. Lecture and laboratory.

603 *Design Environment 2*
Design foundation: Application of the elements of structure – line, sheet, solids, modules; methodology and teaching techniques. Lecture and laboratory.
Communication: Further development of principles of communication through drawing and presentation, technical drawing, and photography; methodology and teaching techniques. Lecture and laboratory.

604 *Fabrication and Production 1*
The development of basic skills in the use of hand tools and machines for the elementary grade levels utilizing natural and synthetic materials; methodology and teaching techniques. Lecture and laboratory.

605 *Fabrication and Production 2*
Further development of basic skills in the use of hand tools and machines for the elementary grade levels through a problem-solving approach; methodology and teaching techniques. Lecture and laboratory.

606 *Material Science 1*
The study of the structure and properties of natural and synthetic materials. Methodology and teaching techniques. Lecture and laboratory.

607 *Material Science 2*
Further study of the structure and properties of natural and synthetic materials; methodology and teaching techniques. Lecture and laboratory.

608 *Curriculum Development 1*
Investigation, interpretation, and implementation of current Industrial Arts programs for the elementary level. Lecture and assignment.

609 *Curriculum Development 2*
A study of the factors involved in the development of an appropriate elementary Industrial Arts program. Lecture and assignment.

610 *Philosophy 1*
Part I of a study of contemporary aims, problems and practices in Industrial Arts education at the elementary level. Lecture and seminar.

611 *Philosophy 2*
Part II of a study of contemporary aims, problems and practices in Industrial Arts education at the elementary level. Lecture and seminar.

612 *Administration 1*
Principles of classroom management relating to records, equipment, supplies, housekeeping, and safety. Lecture and seminar.

613 *Administration 2*
Examination of administrative problems relating to management of budget, equipment, supplies, and records. Lecture and seminar.

Intermediate
See descriptions of courses for full year programs Section 99.

Specialist
See descriptions of courses for full year program Section 100.

Further information, and application forms may be obtained from The Director, Technical and Industrial Arts Department, The College of Education, 371 Bloor Street West, Toronto 181, Ontario.

Occupational des Summer Sessions

If a sufficient number of candidates apply, a six-week program commencing July 4 and ending August 11 (two weeks for each subject) leading to the Interim Occupational Certificate, Type B (Practical Subjects) will be offered in Toronto only, in the following subjects:
Care of the Sick and Family Care, Custodial Services, Electrical Appliance Repair, Food Preparation and Hygiene, Painting and Decorating, Personal Grooming, Retail Sales, Rough Carpentry, Service Station Operation, Sewing and Alterations, Small Engines, Trowel Trades, Waiter and Waitress Training, and Welding.

To this program may be admitted candidates who meet the general admission requirements, and in addition:

i hold an Interim or Permanent Elementary School Teacher's Certificate and have three years of related industrial experience, or

ii hold an Interim or Permanent Elementary School Certificate and an Intermediate Home Economics Certificate, or

iii hold an Interim or Permanent Elementary School Teacher's Certificate and an Intermediate Industrial Arts Certificate, or

iv hold an Interim Vocational Certificate, Type B, or

v have standing in all professional courses leading to an Interim Vocational Certificate, Type B, and not less than 40% average on the Technical Proficiency Examinations and have had approved practical experience in three occupational or service trade areas, and

vi have a contract to teach Occupational (Practical Subjects) for the 1972–73 school year.

Before candidates for the above-mentioned program may be recommended for certification they:

i will be required to pass three Technical Proficiency Examinations following the final summer program, and

ii will submit acceptable Subject Analyses, Courses of Study, Shop Plans, and Equipment Lists.

NOTE: Candidates who do not have the necessary work experience will be required to take a second six-week program of practical subjects.

To Part II may be admitted candidates who have completed Part I.

37. Attendance at Summer Sessions

Owing to the compact nature of the Summer Sessions, absenteeism cannot be tolerated except for reasons of health and then only for a maximum of five days supported by a medical doctor's statement. This regulation applies to all candidates attending all Summer Sessions.

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The University of Toronto issues the following calendars and other publications detailing courses of instruction given by the University. Requests for calendars or information may be directed to the Office of Admissions of the University or to the Secretary of the particular Faculty, School or Institute.

Admission Information	Admission Awards Undergraduate Admission Handbook Undergraduate Admission Bulletin
l Science and Engineering	Faculty of Applied Science and Engineering Engineering at Toronto – descriptive brochure
Architecture	Faculty of Architecture, Urban and Regional Planning and Landscape Architecture
s and Science	Faculty of Arts and Science St. George Campus Scarborough College Calendar Erindale College Calendar
Business	School of Business – Graduate Program in Business Administration
Child Study	Institute of Child Study
Dentistry	Faculty of Dentistry Division of Postgraduate Dental Education Division of Dental Hygiene
Education	The College of Education Graduate Degrees in Education*
Extension	Degree Programmes in Extension Diploma and Certificate Programmes in Extension Continuing Education Programme in Extension
Food Sciences	Faculty of Food Sciences
Forestry	Faculty of Forestry
duate Studies	School of Graduate Studies
Hygiene	School of Hygiene
Law	Faculty of Law
brary Science	School of Library Science
Medicine	Faculty of Medicine, Medical Course Division of Rehabilitation Medicine Division of Postgraduate Medical Education
Music	Faculty of Music The Royal Conservatory of Music Year Book Syllabi (Please State Subject)
Nursing	School of Nursing
Pharmacy	Faculty of Pharmacy
al and Health Education	School of Physical and Health Education
Social Work	School of Social Work
Printer	University of Toronto Press

*Write to: Ontario Institute for Studies in Education, 252 Bloor Street West, Toronto 181, Onario.

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Calendar
1973-74

FACULTY OF EDUCATION
LIBRARY
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University of Toronto

MCMLXXIII

MCMLXXIV

MCMLXXIII

MCMLXXIV

Faculty of Education
University of Toronto
Calendar 1973–74

In view of increasing costs of supplies and labour, fees and other charges set forth in this calendar are subject to change by the Governing Council.

Enquiries concerning courses at the Faculty of Education should be addressed to the Registrar, Faculty of Education, 371 Bloor Street West, Toronto, Ontario M5S 2R7.

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Sept. 10 to Dec. 21	Autumn Term, 1973
September 10 to 14	Registration Week
September 17	Classes begin
October 1	Last date for changing optional subjects
October 8	Thanksgiving Day
November 11	Remembrance Day
December 31	Last date for accepting applications for supplemental teaching and practical tests
January 7 to April 5	Winter Term, 1974
January 7	Last date for receiving the second instalment of fees
March 18 to 22	Reading Week
March 26	Registration, experimental 17-month Vocational and Occupational Program
April 12	Good Friday
April 8 to May 10	Spring Term, 1974
April 29 to May 10	Final examinations
May 27	University Convocation begins
June 22	Last date for accepting applications for August supplemental written examinations

Academic Calendar, Summer Session, 1973

3 to August 3	Business Education Summer Sessions for Intermediate Accountancy, Data Processing, Marketing, and Secretarial, Parts I, II and Specialist
3 to August 3	Commercial-Vocational Completing Summer Session (C2)
3 to August 3	Commercial-Vocational Teachers, Third Summer Session (C3)
3 to August 3	Counsellor Education Summer Session, Parts I, II, III, IV
3 to August 10	Dramatic Arts Summer Session, Parts I, II and Specialist
3 to August 10	High School Assistants' Summer Session for Teachers with Professional Education
3 to August 10	High School Assistants' Type A Summer Session
3 to August 10	Home Economics Summer Course for qualified Elementary School Teachers
3 to August 17	Industrial Arts Summer Session, Elementary, Parts I and II
3 to August 3	Industrial Arts Summer Session, Intermediate, Part III
3 to August 3	Industrial Arts Summer Session, Specialist, Parts I, II and III
3 to August 10	Occupational, Type B (Practical Subjects), Trades Program Summer Session, Parts I and II
3 to August 3	Occupational, Type A (Practical Subjects), Summer Session, Parts I and II
y 3 to July 27	Outdoor Education Course
to August 10	Physical and Health Education (Women) Summer Session, Intermediate, Parts I and II
to August 10	Physical and Health Education (Women) Summer Session, Specialist
to August 10	Physical and Health Education (Men) Summer Session, Intermediate, Parts I and II
to August 10	Physical and Health Education (Men) Summer Session, Specialist
3 to August 3	Physical and Health Education for Elementary School Teachers, Summer Session, Elementary, Intermediate Parts I and II, and Supervisor's
to August 10	School Librarianship Summer Session, Intermediate, Part I
to August 17	Vocational, Type B, Summer Session, for candidates with approved professional training
3 to August 3	Vocational, Type A, Summer Session, Parts I and II
3 to August 3	Vocational, Type A, Special one-summer Program for holders of Applied Science degrees

Historical Note

When secondary education in Upper Canada was officially introduced in 1807, qualifications for teachers were ill-defined and professional training was non-existent. Nevertheless, a surprising number of 'educated gentlemen' found their way into the classrooms of the District Grammar Schools. Unfortunately, the supply of these superior pedagogues failed to keep pace with the growth of the population and the subsequent increase in schools. But in spite of the difficulties encountered, no serious attempt to provide teacher training was made for more than half a century.

Beginning in 1858, a number of experiments involving model schools and training institutes was conducted with the aim of improving the academic and professional qualifications of teachers. None of these endeavours met with any widespread satisfaction.

In 1890, all such operations were abandoned with the founding of a provincial School of Pedagogy in Toronto. Seven years later, this institution was moved to Hamilton and renamed the Ontario Normal College.

In 1906, the training of secondary school teachers was modified drastically when Faculties of Education were organized at the University of Toronto and at Queen's University. In Toronto, the Faculty offered professional secondary school courses in Pedagogy. In order to improve the practical and experimental aspects of its program, the Faculty established, in 1910, a practice school, the University of Toronto Schools.

This pattern of teacher training continued until after the close of World War I. In 1920, it came to an abrupt end when the Faculty of Education at Queen's was discontinued and the Faculty at Toronto was designated as the Ontario College of Education, University of Toronto.

In the following years the College expanded its program, services, and facilities, and added a number of important departments: the Guidance Centre in 1945, the Vocational and Industrial Arts De-

partment in 1946, and the Department of Advanced Academic Recommendation (now known as the Office of Advanced Standing) in 1957.

In 1966, the Departments of Graduate Studies and Research were transferred to the Ontario Institute for Studies in Education. In the same year a new agreement for the operation of the Ontario College of Education was made between the Minister of Education and the University of Toronto, establishing a College Council and Advisory Board. By the same agreement, the name of the College was changed to *The College of Education, University of Toronto.* Since that time there has been further expansion with the addition of the Educational Media Centre in 1966, the Department of Computer Studies in 1968, and the Institute of Child Study in 1971.

During a period of forty-five years The College was the sole institution in the province for the preparation of secondary school teachers. In 1965, the situation altered with the opening of Althouse College of Education, The University of Western Ontario. Since then several other Faculties of Education have been established in Ontario.

Effective July 1, 1972, the College was formally designated as the *Faculty of Education, University of Toronto.*

University Administrative Officers 1972–73

President	J. R. Evans, M.D., D.PHIL., F.R.C.P.(C), LL.D.
Assistant to the President	N. S. C. Dickinson, C.D., B.A.
Vice-President and Provost	D. F. Forster, B.A., A.M.
Vice-Provost, Research Administration	Miss S. Dymond, B.A., Q.C.
Vice-Provost	J. D. Hamilton, M.D., F.R.C.P.(C), D.SC.
Vice-Provost	P. P. M. Meincke, B.SC., M.A., PH.D.
Vice-Provost	R. Ross, M.B.E., M.A.
Vice-President, Institutional Relations and Planning	J. H. Sword, M.A., LL.D.
Vice-President, Business Affairs	A. G. Rankin, B.COM., F.C.A.
Assistant Vice-President	F. R. Stone, B.COM., F.C.A.
Vice-President, Internal Affairs	Mrs. J. K. Conway, B.A., PH.D.
Secretary to the Governing Council	D. S. Claringbold
Chief Librarian	R. H. Blackburn, M.A., B.L.S., M.S., LL.D.
Acting Director of University Extension	E. M. Gruetzner, B.A.
Director of Admissions	W. Kent, M.A.
Director of Statistics and Records	J. M. Tusiewicz, B.SC.(ENG.), M.A.SC., M.B.A.
Director of Student Awards	P. S. Phillips, B.A., C.A.
Director of Finance	M. E. Dedrick, B.COM., M.COM.
Director of Physical Plant	J. T. Turner, B.SC., P.ENG.
Director, Special Projects	G. P. Hiebert, B.COM., C.A.

Director of Personnel	R. F. Brown
Director of Administrative Services	M. A. Malcolm, B.A.
Director of Information Systems Department	V. H. Mikkelson
Co-ordinator Campus Services	Miss H. L. Reimer, B.A., B.PED.
Director of the Advisory Bureau	D. J. McCulloch, B.A., M.D., D.PSYCH., F.R.C.P.(C)
Director of Athletics and Recreation—Men	A. D. White, B.A., M.ED.
Director of Athletics and Physical Education—Women	Miss A. Hewett, B.ED., P.E.
Director of Career Counselling and Placement Centre	D. Currey, B.A.SC.
Director of University Health Service	G. E. Wodehouse, M.C., M.D., F.R.C.P.(C), M.R.C.P.
Director of Housing Service	Mrs. M. G. Jaffary, B.A.
Director of the International Student Centre	E. A. McKee, M.A.
Warden of Hart House	J. G. Lengellé, M.A., PH.D.
Director of the University of Toronto Press	M. Jeanneret, B.A., LL.D.
Director of the University News Bureau	K. S. Edey
Director of Alumni Affairs	J. W. Duncanson, B.A.
Director of Development	R. L. Jones

Faculty of Education
Administrative Staff 1973–74

Dean	D. F. Dadson, B.A., B.ED.
Assistant Dean	H. O. Barrett, C.D., B.A., D.PAED., F.O.T.F.
Director of the Department of Technical and Industrial Arts	A. W. Frizzell, B.A.SC., P.ENG.
Director of the Department of Business Education	A. P. Seggie, B.A.
Director of Practice Teaching	J. W. Dodd, B.A.
Director of the Guidance Centre	C. L. Bedal, B.A., M.ED.
Manager of the Guidance Centre	S. J. Totton, B.A.
Director, Office of Advanced Standing	J. S. Carlisle, B.A., B.PAED.
Principal, University of Toronto Schools	H. D. Gutteridge, M.A.
Director of the Institute of Child Study	M. F. Grapko, M.A., PH.D.
Registrar	Alice A. L. Elliott, B.A.
Assistant Registrar	G. A. Whyte, B.A., B.J.
Librarian	Mary C. Shortt, B.A., M.L.S.
Administrative Assistant and Office Manager	G. Mitchell, B.A.
Nurse	Gwendolyn M. Allan, R.N.

Faculty of Education
Academic Staff 1973–74

Administration and Program Development

Professor J. W. Greig, B.A., ED.D.
ciate Professor V. K. Gilbert, B.SC., M.ED.
istant Professor R. A. Martin, B.A.SC., M.ED., PH.D.
istant Professor B. C. Stewart, B.A., M.ED.
Lecturer A. Teresa Sheehan, B.A., M.ED., PH.D.
Lecturer J. D. Wood, M.A., A.R.C.T.

Art Education

fessor Emeritus P. H. Taçon, B.PAED., M.A.
ciate Professor J. A. M. Emerson, M.A.
istant Professor M. J. McCarthy, M.A., PH.D.

Business Education

Professor A. P. Seggie, B.A.
Professor G. A. Reid, B.COM., B.ED., M.A., F.C.C.T.
ciate Professor J. H. Dool, B.A.
ciate Professor R. B. Wilson, B.COM.
istant Professor B. E. Conchie, B.A.

Classics

Professor B. C. Taylor, M.A.
Lecturer K. E. Prentice, M.A.

Computer Studies

ciate Professor L. J. La Fave, B.ED., M.B.A.
istant Professor D. W. Garth, B.COM.
istant Professor G. D. Milbrandt, B.S.ED., M.ED.

Counsellor Education

ciate Professor C. L. Bedal, B.A., M.ED.
istant Professor B. R. Eardley, B.S., M.ED.
istant Professor P. A. Manuel, B.A., M.ED.

Dramatic Arts

ciate Professor J. C. W. Saxton, M.A.
istant Professor A. M. Gifford, M.A.
Lecturer Juliana M. Saxton, B.A.

Educational Media

Professor	D. A. Clee, B.A., M.SC., F.R.G.S.

Educational Psychology

Associate Professor	R. W. Dent, M.A., PH.D.
Associate Professor	C. C. Brodeur, M.A., M.A.(PHIL.), PH.D.
Associate Professor	S. L. Kong, B.A., M.ED., PH.D.
Associate Professor	W. V. Trott, M.A.
Assistant Professor	D. G. Crawford, M.A., PH.D.
Assistant Professor	Conchita Tan-Willman, B.S.E., M.A., PH.D.
Assistant Professor	R. J. Volpe, M.A., PH.D.
Assistant Professor	A. J. Zimmerman, B.A., M.ED.
Lecturer	D. S. J. Shackel, M.A.

Elementary Education

Professor	G. E. Tait, B.A., B.PAED., ED.D.

English

Professor	R. J. McMaster, B.A., B.ED.
Professor	J. H. Stevens, M.A.
Associate Professor	Johan Aitken, M.A.
Associate Professor	A. C. Coman, M.A.
Associate Professor	Joan Laird, B.A.
Associate Professor	J. W. MacDonald, M.A., ED.D.
Associate Professor	R. T. Shephard, B.A.
Assistant Professor	A. A. Bowers, B.A.
Assistant Professor	K. J. Weber, B.A.

Geography

Associate Professor	W. E. Sager, C.D., B.A., F.A.G.S.
Associate Professor	R. P. Baine, M.A.
Associate Professor	A. Balins, M.A.
Associate Professor	Una Elliott, M.A., B.ED.

History, Economics, Political Science, Psychology and Sociology

Professor	J. C. Ricker, M.A.
Associate Professor	R. W. P. Bowles, B.A.
Associate Professor	J. E. Cruickshank, M.A.
Associate Professor	G. Smith, M.A.
Assistant Professor	L. R. Hill, M.A.
Assistant Professor	J. D. Thexton, M.A.
Assistant Professor	G. A. Whyte, B.A., B.J.
Lecturer	Gail Regan, M.A.

History, Philosophy, and Sociology of Education

Professor Emeritus	A. F. Skinner, M.A., B.SC., PH.D., F.E.I.S.
Associate Professor	G. W Bancroft, BA., M.ED., PH.D.
Professor	G. H. Boyes, M.A.

sistant Professor D. B. Brady, M.A., M.ED.
sistant Professor T. W. Goodenough, M.A.
sistant Professor L. J. Stott, B.ED., PH.D.
Lecturer K. A. McLeod, B.A., M.ED.
Lecturer S. T. Rusak, B.A., M.ED.

Home Economics

Professor Helen Finnegan, B.A., M.S.
sistant Professor Audrey M. Warner, B.A., M.SC.
sistant Professor H. Annette Yeager, B.H.SC., M.ED.
Special Lecturer Phyllis J. Meiklejohn, M.S.

Mathematics

Professor D. L. Mumford, B.A.
Professor K. O. May, M.A., PH.D.
Professor W. W. Sawyer, M.A.
sociate Professor D. W. Alexander, B.A., B.ED., M.SC.
ssistant Professor F. Ebos, M.SC.
ssistant Professor D. L. Fraser, B.SC., B.ED., M.A.
ssistant Professor H. L. Ridge, B.SC., M.A.

Modern Languages

Professor R. J. Jones, B.A., MUS.BAC., A.R.C.T.
sociate Professor G. A. Kirk, M.A., DIP.D'E.
sociate Professor R. R. A. Roy, B.PHIL., M.A.
sociate Professor C. R. Theodore, M.A.
ssistant Professor H. Hainsworth, M.A.
ssistant Professor E. F. James, M.A., D. de IIIème cycle
pecial Lecturers:
Professor H. G. Schogt, M.A., PH.D.
sociate Professor A. M. Gordon, A.M., PH.D.
sociate Professor Maddelena Kuitunen, DOTT. IN LETT., M.A., PHIL.M.
Lecturer Gabriella J. Leech, DOC.PHIL.

Music

ssociate Professor Natalie Kuzmich, MUS.BAC., M.A.

Physical and Health Education (Men)

Professor J. R. Life, B.P.H.E., M.ED.
Professor J. H. Passmore, B.A., B.P.H.E., B.ED.
ssistant Professor D. F. Fawcett, B.P.H.E., M.A.
ssistant Professor R. C. Goode, B.P.H.E., M.A., D.PHIL.
ssistant Professor P. B. Robertson, B.P.H.E., B.A., M.ED.

Physical and Health Education (Women)

Professor Jean M. Stirling, B.A., DIP.P.H.E.
ssistant Professor F. June M. Collard, B.P.H.E., B.A., M.SC.

Practice Teaching

Professor	J. W. Dodd, B.A.
Associate Professor	R. Cairns, B.A.
Associate Professor	W. J. London, B.A.

School Librarianship

Professor	Margaret B. Scott, B.A., B.L.S.
Assistant Professor	Fay Blostein, B.A., B.L.S.
Assistant Professor	R. J. Smith, B.A., B.L.S.

Science

Professor	R. G. Casson, B.SC.
Associate Professor	W. A. Andrews, M.SC., B.ED.
Associate Professor	H. M. Lang, B.A.
Assistant Professor	D. I. Galbraith, B.SC.
Assistant Professor	T. J. E. Wolfe, B.S.A.
Lecturer	J. F. Eix, B.SC.
Lecturer	G. W. Hunt, B.A.

Speech Consultant

Lecturer	Esmé Crampton

Technical and Industrial Arts

Professor	A. W. Frizzell, B.A.SC., P.ENG.
Professor	T. H. G. Luther, B.ED., M.A.
Associate Professor	E. P. Emerson, B.A., M.ED.
Associate Professor	D. J. Long, B.A., B.ED.
Associate Professor	W. S. Sloan, B.A., A.O.C.A.
Associate Professor	C. H. Wall, B.ED., M.A.
Associate Professor	R. W. Wilson, B.SC., M.I.E.E.
Assistant Professor	R. G. Burfield, B.A., B.ED.
Assistant Professor	A. Gaydos, B.A., M.ED.
Assistant Professor	I. T. Malloch, B.A., M.SC.
Assistant Professor	C. Otto, B.A.
Assistant Professor	R. Sramek, B.A.
Assistant Professor	H. J. Taylor, B.A., B.ED.
Assistant Professor	W. J. Watson, B.A., B.ED.
Lecturer	P. J. Briggs
Lecturer	J. G. A. Jameson
pervisor, Technical Proficiency Evaluation	E. Gascoigne, P.ENG.

Staff of University of Toronto Schools 1973–74

Principal	H. D. Gutteridge, M.A.
Assistant Principal	C. D. S. Bate, B.A.SC., M.ED.
Art	D. F. Boutros, B.A.
Classics	H. C. Maynard, M.A. K. E. Prentice, M.A.
English	S. H. Bull, M.A. P. A. Grudzien, B.A., B.ED. W. R. H. Montgomery, M.A., PH.D.
History	N. T. McLean, B.A. R. J. Stewart, B.A.
Mathematics	G. A. Fleming, B.A., M.ED. N. D. Fox, B.COM. J. A. Vanstone, B.A.
dern Languages	P. F. L. Gallant, B.A. F. W. Ignatz, B.A. R. J. Moorfield, M.A. W. A. Stickland, B.A.
Music	G. F. FitzGerald
Physical and Health Education	J. L. McElroy, B.P.H.E. W. M. Simons, B.P.H.E., DIP.P.E. J. Stulac, B.P.H.E., B.A.
Science	C. E. B. Le Gresley, B.A., M.ED. F. M. Speed, B.SC.S., B.ED.
Librarian	T. J. Boucher, B.A., M.S.L.S.
hool Counsellor	C. W. M. Pace, B.A., B.S.W.

Staff of the Institute of Child Study 1973–74

*Academic and Research Division**

Professor and Director	M. F. Grapko, M.A., PH.D.
Associate Professor	A. J. Biemiller, M.S., PH.D.
Associate Professor	J. Fair, B.A., B.P.E., M.ED.
Associate Professor	Betty Flint, DIP.C.S., M.A.
Assistant Professor	Dvora Frumhartz, M.A., PH.D.
Assistant Professor	J. P. Klein, M.A., PH.D.
Assistant Professor	Ada Schermann, M.SC.
Assistant Professor	R. J. Volpe, M.A., PH.D.
Lecturer	Frances Biemiller, DIP.C.S., M.SC.
Lecturer	Jennifer Hardacre, DIP.C.S., M.ED.
Lecturer	Margaret L. Kirkpatrick, M.A.

*Part-time members of Staff and Instructors are listed in the calendar of the Institute of Child Study.

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MCMLXXIV

General Information

1. Location of the Faculty of Education

The Faculty of Education is located at the corner of Bloor Street West and Spadina Avenue, in the northwest sector of the St. George Campus, University of Toronto. Mailing address of the Faculty is 371 Bloor Street West, Toronto M5S 2R7.

2. Function of the Faculty of Education

The basic function of the Faculty of Education is the training of teachers for professional service in elementary and secondary schools, especially in the schools of Ontario. Programs of the Faculty provide courses leading to *basic certificates* required for teaching in the high schools, collegiate institutes, vocational schools and elementary schools of Ontario. Other Faculty courses lead to *additional certificates* in areas of subject specialization. The Faculty itself does not grant teaching certificates. These are issued by the Ontario Ministry of Education on the recommendation of the Council of the Faculty. With the exception of skilled tradesmen and some others taking Vocational courses, students in the Faculty of Education are required to hold acceptable university degrees.

3. Faculty Facilities

The Faculty of Education is equipped with classrooms, lecture rooms, library, laboratories and gymnasia, an educational media centre with a television studio and mobile television unit, language laboratories, a theatre studio, a computer centre and a typing laboratory.

4. Faculty Library

Students will find in the Library a major collection of books and periodicals on all aspects of secondary and elementary education, as well as small working collections on the various subjects taught in Ontario schools. In addition to its loan facilities, the Library provides a reference service to assist students in locating material on educational psychology, school administration, and methods of teaching specific subjects.

The Library's selected collection of mounted pictures, filmstrips, pamphlets, slides, recordings and document kits is available to the students for use both in demonstration lessons at the Faculty and in their practice teaching assignments at outside schools. Facilities for previewing audiovisual aids are provided in the Library.

Students at the Faculty are entitled to use the main University of Toronto Library, where they can obtain extensive material on subjects other than education.

Health Centre

The Health Centre, in charge of a registered nurse, offers to students first aid, counsel with health problems, and referrals to doctor, dentist, or hospital as appropriate. The Centre is open each week during the session, Monday through Friday, from 8.30 a.m. to 3.30 p.m., Room 115, the Faculty of Education.

6. The Student Governments of the Faculty

The Technical and Industrial Arts Student Council organizes extracurricular activities for its students, and acts on their behalf in any matter that may arise relating to the Technical and Industrial Arts Program.

The Institute of Child Study has a five-member Student Council whose purposes include providing an opportunity for students' ideas to be expressed and integrated, giving them a voice in the decision-making bodies of the Institute, and maintaining channels of communication between students and staff.

The H.S.A. Student Assembly is concerned with all matters pertaining to students of the Faculty. It maintains a year-round office at 703 Spadina Avenue to provide continuity of organization in student affairs. Through their governments all students have voting members on the Council of the Faculty and its committees. They are also represented on the Students' Administrative Council of the University.

. University of ronto Schools

The University of Toronto Schools, established in 1910 as a division of the Faculty of Education, is a day school for students from Grade 7 to Level IV. The normal enrolment is 420 students selected by competitive examinations from among a large number of applicants. Each year classes are admitted to Grades 7 and Level I respectively to replace the class graduating from Level IV. The Ontario curriculum leading to university entrance is provided, with opportunities for enrichment, acceleration, independent study, and experimentation. The annual tuition fee is $300.00. The resources of the school are available to staff and students of the Faculty for teaching practice, demonstration, and experiment.

8. Guidance Centre

The Guidance Centre produces and distributes publications, standardized tests, and other educational materials for teachers and for guidance counsellors.

The main office of the Centre is located at 1000 Yonge Street, Toronto M4W 2K8 (telephone 928-3210). Office hours are from 8.30 a.m. until 4.45 p.m. daily. The warehouse is at 10 Alcorn Avenue, Toronto M4V 1E4.

9. Institute of Child Study

The Institute is located at 45 Walmer Road. A Course of Studies leading to a Diploma in Child Study is offered (See Section 48 for description of this program). A laboratory school consisting of 165 children, ages 3 to 12 years, serves as a teaching and research facility.

10. Social Counsellor Education Program

To assist native people in attaining a greater measure of meaningful involvement in their own Social Services, the Faculty of Education offers the Social Counsellor Education Program. The purpose of this program is to develop leadership abilities in those wishing to enhance the opportunities of members of their communities within a social and educational setting.

Additional information may be obtained through Professor D. B. Brady, Department of History, Philosophy, and Sociology of Education, Faculty of Education, 371 Bloor Street West, Toronto M5S 2R7.

11. University Facilities

Students registered for courses in the Faculty of Education may use the University's athletic facilities, and Hart House, under such conditions as obtain with other students. They will also be admitted to the Royal Ontario Museum, 100 Queen's Park, and to the Toronto Art Gallery, Dundas Street, from 9 a.m. to 5 p.m., on presentation of their registration cards.

12. University Health Service

Any student may consult a staff physician at the Health Service 9 a.m. to 5 p.m., Monday to Friday while the University is in session. The University does not accept any responsibility for injuries sustained by students while engaged in Physical Education classes or in University athletic activities, but through the Health Service provides for treatment within the following limits: minor injuries are treated at its offices; treatment for more serious injuries will be provided if such treatment is given under the direction and care of staff retained by the Health Service. Treatment is limited to students who suffer accidents while engaged in and which arise out of University Physical Education classes and athletic activities.

Health Service (Men), 256 Huron Street, 928-2459
Health Service (Women), 256 Huron Street, 928-2456

13. University Advisory Bureau

The Advisory Bureau is prepared to aid in all problems of a personal nature, as well as interpersonal relationships. The staff consists of a psychiatrist, a psychologist, and a group of counsellors. The Advisory Bureau is located at 631 Spadina Avenue (telephone 928-2684).

14. Housing Service

The University of Toronto maintains a listing of rooming houses, flats, apartments and homes. Information on these may be obtained through the Housing Service office at 49 St. George Street, Toronto M5S 2E5.

Off-campus housing of this nature is not subject to University regulation, but every effort is taken to make the information as complete as possible. Students are encouraged to assist in this effort by reporting on the quality of the accommodation they have occupied.

A limited amount of accommodation is offered in exchange for part-time services such as housekeeping or babysitting.

St. Andrew's-Jniversity Day Nursery

This day nursery, established and supported by the University of Toronto, the Graduate Students' Union, and the Students' Administrative Council, provides pre-school education and day care facilities for children of University of Toronto students. Children aged two to five years are accepted.

The nursery, temporarily located at St. Andrew's United Church, 117 Bloor Street East, is well equipped and staffed, and is licensed under the Day Nursery Act, Province of Ontario. It operates from 8.30 a.m. to 5.30 p.m. throughout the winter academic session. Fees are reasonable, and noon meals and morning and afternoon snacks are provided. Information may be obtained from the nursery (telephone 921-7078) or from the School of Graduate Studies.

16. Language and Medical Regulations

Facility in English. For a candidate whose first language is other than English a requirement for admission will be the passing of a Communication Test for Teaching in the English Language. The test will be conducted by a Committee composed of representatives of the Ontario Secondary School Teachers' Federation, the Department of English of the University of Toronto, and the Council of the Faculty. Arrangements for the test will be made by the Registrar's Office, the Faculty of Education.

The Faculty is prepared to consider other evidence that may be submitted to the Registrar for evaluation.

Physical Unfitness of Candidates. On the Dean's report to the Minister of Education as to the physical unfitness of a student for training as a teacher, the Minister may require a special medical examination of such student, and, as a result thereof, may direct that he be not eligible for recommendation for a department certificate.

17. Tuition and Other Fees

Fees for the High School Assistants' Program and Technical and Industrial Arts Programs of the One-Year Session:

Academic Fee	Men $580	Women $580
Incidental Fees	Men $ 72	Women $ 62
Total Fees (if paid in one instalment)	Men $652	Women $642
First Term Instalment, due September 7*	Men $432	Women $422
Second Term Instalment, due January 7	Men $232	Women $232

*Deduct $50 deposit from first instalment if paid in advance.

Academic Fee for the Technical and Industrial Arts March Intake Program

First Instalment, due March 26, 1973	Men $460	Women $460
Second Instalment, due July, 1974	Men $120	Women $120

NOTES:

1 An applicant who is admitted to the Faculty of Education will be required to pay at least the First Term instalment of fees by September 7, 1973, and before applying to the Faculty Registrar for his registration card.

2 The Academic Fee (which includes the examination and University Library fees) and the Incidental Fees are to be paid to the *University of Toronto* according to instructions on the *Fees Form* obtained from the Registrar.

3 The fee for students attending the Session after Christmas is $290 plus Incidental Fees.

4 Incidental Fees include the following: Hart House, Students' Administrative Council, Athletic, and Health Service.

5 An additional charge of $12 is made for payment of fees in two instalments.

6 After January 14, an additional deferred payment fee of $15 will be imposed.

7 There is no additional fee for the High School Assistants' Program Type A, or for courses leading to additional certificates when taken concurrently with the High School Assistants' Program, Type B.

8 Admission acceptances must be confirmed, in writing, to the Registrar of the Faculty of Education within twenty-one days of the date of acceptance by the Faculty, accompanied by a $50 deposit payable to the *University of Toronto* by certified cheque or money order. The deposit will be applied to the applicant's fee. Forty dollars ($40) of the $50 deposit will be refunded if the applicant withdraws his application, in writing, on or before July 31, 1973. The full deposit is refundable if the applicant is denied admission because of failure to graduate.

9 A special fee of $25, payable to the *University of Toronto*, is required of all students who register for *Outdoor Education* 115, to cover the cost of field trips and an Outdoor Education weekend. Cheques will be collected the first day of the course.

10 A special fee of $25, payable to the *University of Toronto*, is required of all students who register for *Culture and Society as they relate to the teaching of French* 129, to cover the travel cost of a field trip to the province of Quebec. Cheques will be collected the first day of the course.

11 A candidate who applies after the last date for application to any course listed in this calendar will be assessed a late fee of $20 if the candidate is admitted to the course.

12 A candidate who withdraws before the end of his course will be charged fees in proportion to the period of his attendance, i.e. up to the effective date of withdrawal. After twenty weeks no fees will be refunded.

For Supplemental Examinations:

Fee for each supplemental examination in one subject of any course except High School Assistants', Type A	$ 10

Fee for the supplemental examination(s) for any High School Assistant's Type A Certificate	$ 20
For Summer Sessions:	
Summer Session for Teachers with Professional Education	$120
Special Student, one subject	$ 50
Type A Seminars, Summer Session	$120
Business Education Summer Sessions:	
Intermediate, Parts I and II, each	$100
Specialist	$100
Commercial-Vocational, each	$100
Commercial Examinations, per subject	$ 10
Counsellor Education Summer Sessions:	
Parts I, II, III and IV, each	$100
Dramatic Arts Summer Sessions:	
Parts I, II and Specialist, each	$120
Home Economics Summer Session:	
Intermediate Course for qualified Elementary School Teachers	$120
Industrial Arts Summer Sessions:	
Elementary, Parts I and II each	$140
Intermediate, Part III	$100
Specialist, Parts I, II and III, each	$100
Physical and Health Education Summer Sessions:	
For Secondary School Teachers	
Intermediate Parts I and II (Men and Women), each	$120
Specialist (Men and Women), each	$120
An extra fee will be charged for an Outdoor Education Course, taken in conjunction with a Physical and Health Education Course.	
For Elementary School Teachers	
Elementary, Intermediate Parts I and II, and Supervisor's, each	$100
School Librarianship Summer Session:	
Intermediate, Part I	$120
Vocational and Occupational Summer Sessions:	
Type B for candidates with approved professional training	$140
Type A, Parts I and II, each	$100
Type A (for Engineers, Architects, Nurses, etc.)	$100
Occupational Trades, Two-week Sessions, each	$ 40

18. One-Year Programs Offered in 1973–74

The Faculty of Education will offer the following One-Year Programs leading to Ministry of Education certificates, as well as to the Bachelor of Education degree:

Interim High School Assistants', Type B (See Sections 27–33)
Interim High School Assistants', Type A (See Sections 43–45)
Art Education (See Sections 35, 36)
Business Education (See Sections 35, 36, 46)
Counsellor Education (See Sections 35, 36)
Dramatic Arts (See Sections 35, 36)
Elementary Education (See Sections 35, 36, 38–40)
Home Economics (See Sections 35, 36)
Industrial Arts (High School Assistants') (See Sections 35, 36)
Industrial Arts (Intermediate and Specialist) (See Sections 95–100)
Music (See Sections 35, 36)
Occupational, Type B (Practical Subjects) (See Sections 78, 80, 82, 83, 86)
Occupational, Type A (Practical Subjects) (See Sections 80, 82, 85)
Physical and Health Education (See Sections 35, 36)
School Librarianship (See Sections 35, 36)
Vocational, Type B (See Sections 78, 83)
Vocational, Type A (See Sections 79, 85)
Vocational Home Economics (See Section 84)

NOTE:
Details of courses included in the High School Assistants' Programs and Programs for Additional Certificates are found in Sections 49–76. Details of courses included in Technical and Industrial Arts Programs are found in Sections 88–94, 101, 102.

19. Summary of Secondary School Certificates

Listed below are the teaching certificates required for various purposes in the secondary schools of Ontario. All certificates referred to in this calendar are Interim, not Permanent.

Certificate	*Subjects Taught by Certificate Holders*
High School Assistant's Certificate, Type B	Academic and General Subjects
High School Assistant's Certificate, Type A	Academic and General Subjects
Vocational Certificate, Type B	The Vocational Subject named on the Certificate
Vocational Certificate, Type A	The Vocational Subject named on the Certificate
Occupational Certificate, Type B (Practical Subjects)	Occupational (Practical Subjects)

Occupational Certificate, Type A (Practical Subjects)	Occupational (Practical Subjects)
Intermediate Industrial Arts Certificate	Industrial Arts Subjects
Specialist Industrial Arts Certificate	Industrial Arts Subjects
Intermediate Certificate in Accountancy, Data Processing, Marketing, or Secretarial	Business Education Subjects
Specialist Certificate in Accountancy, Data Processing, Marketing, or Secretarial	Business Education Subjects
Commercial-Vocational Certificate, Type B (Commercial Subjects named)	Business Education Subjects

NOTE:
1 For *additional certificates*, see Section 36.
2 For *Elementary School Teacher's Certificate*, see Section 38.

0. Interchange of Ontario Teaching Certificates, lementary and Secondary

1 The holder of a Permanent Elementary School Teacher's Certificate, Standard 4, may, upon accepting a contract from a board to teach in a secondary school, be granted an Interim High School Assistant's Certificate, Type B.

2 The holder of a Permanent High School Assistant's Certificate may, upon accepting a contract from a board to teach in an elementary school, be granted an Interim Elementary School Teacher's Certificate, Standard 4.

3 The holder of a Permanent High School Assistant's Certificate, who meets the Ministry of Education requirements for Vocational certification or Occupational certification, may, upon accepting a contract from a board to teach a Vocational, Technical or Occupations course of a secondary school, be recommended for an Interim Vocational Certificate, Type B, or an Interim Occupational Certificate, Type B (Practical Subjects), upon successful completion of one seven-week summer session, and after having obtained standing in the appropriate Technical Proficiency Examinations. Acceptable assignments in Subject Analysis, Course of Study, Shop Plan and Equipment List must also be submitted.

4 The holder of a Permanent Vocational Certificate, a Permanent Occupational Certificate (Practical Subjects) or a Permanent Commercial-Vocational Certificate, who has a university degree acceptable for admission to the Type B course at a Faculty of Education, may, upon accepting a contract from a board to teach in a secondary school, be granted an Interim High School Assistant's Certificate, Type B.

5 It is expected that most transfers referred to in (1) and (2) above will take place in the case of teachers teaching in the general range of Grades 7 to 10. Persons transferring to teach in grades beyond this range are advised to take summer courses which will help them to adjust to the new duties.

21. Endorsement of the High School Assistant's Certificate, Type B

The holder of a High School Assistant's Certificate, Type B, may have his certificate *endorsed* under the following conditions:
A candidate who has obtained second class standing or better in an approved university course to a total of 15 credits in one secondary school academic subject, or 24 credits (12 credits in each) in two academic subjects, and who completes a year of successful teaching subsequent to the date of his Type B Certificate in such subjects, is eligible for endorsement of his Type B Certificate.
The candidate must apply to the *Office of Advanced Standing,* Faculty of Education, University of Toronto, for approval of his credits and subsequently to the appropriate Director or Superintendent of Education concerned, for endorsement.

22. Advanced Standing

The Office of Advanced Standing gives rulings on academic standing to candidates who are seeking endorsement of the High School Assistant's Certificate, Type B, or who are applying for admission to a course leading to a High School Assistant's Certificate, Type A. Written enquiries should be addressed to the Director, Office of Advanced Standing, Faculty of Education, 371 Bloor Street West, Toronto M5S 2R7.

23. Letter of Standing, Secondary School

A Letter of Standing entitling the holder to teach in an Ontario secondary school for one year will be granted by the Minister of Education to a university graduate from any country who can meet the following conditions:
1 that his university transcripts indicate that the holder has met the academic requirements applicable to Ontario graduates;
2 that his professional training fulfils the requirements of the Ontario Ministry of Education;
3 that a candidate from outside Canada may be required to meet the Special Committee in the Ministry of Education;
4 that he is either a Canadian citizen or has Landed Immigrant status, or has applied for Canadian citizenship.
An application for a Letter of Standing must be forwarded to: The Director of Education Records Branch, Ontario Ministry of Education, Mowat Block, Queen's Park, Toronto M7A 1L8.
On the statement of the principal that the candidate has taught successfully for one year under the authority of a Letter of Standing, he may be recommended by the Supervisory Officer concerned for the Interim High School Assistant's Certificate, Type B.

e Bachelor of tion Degree: ion Programs

The program leading to the Bachelor of Education degree for graduates of the Faculty of Education who were awarded the High School Assistant's Certificate prior to May, 1970, is described in Section 77A; the program for holders of Ontario permanent basic teaching certificates is described in Section 77B.

25. Academic Records and Examinations

Academic Records and Examinations

Examinations

No candidate will be permitted to take more than twice any final examination, or part thereof, for any degree or certificate listed in this calendar, except by permission of the Council of the Faculty.

Checking of Marks

The Faculty policy is *not* to re-read or re-evaluate any examination paper or essay after results have been issued. Examination papers are re-read in each examination in which a mark of less than 50 per cent has been assigned. Papers in which at least 50 per cent has been obtained will not be re-read.

All results are carefully reviewed before being released. However, the clerical work involved in the department and in the Registrar's Office will be checked if a petition is submitted through the Registrar's Office, with a fee of $5 per course. The fee will be refunded if an error is found.

Plagiarism

Plagiarism is a serious offence and is subject to disciplinary action.

Results withheld

Students who have not paid their fees or residence dues in full or who have outstanding library dues or bookstore accounts by the end of the session will not be permitted further registration in the University, will not have transcripts issued on their behalf, and will not receive their diplomas or recommendations for the High School Assistant's certificate until payment is made.

26. Academic Rights of Students

Academic Rights of Students

An appeal to the Council of the Faculty shall be permitted against failure or a Faculty ruling regarding procedure for fulfilling the requirements of the Bachelor of Education degree or a Ministry of Education certificate. An appeal is an instrument by which a student is protected against an error in grading or in final standing, or by which a student may seek to have a regulation of the Faculty waived on academic or compassionate grounds.

Procedure: A student is required to submit, before the end of the calendar year, a written appeal to the Council of the Faculty of Education.

Reconsideration by the Governing Council of the University of Toronto: A student shall have the right to appeal to the Governing

Council to consider the decision of the Council of the Faculty in so far as requirements for the Bachelor of Education degree are concerned by making application to the Secretary of the Governing Council. Reconsideration by the Minister of Education: A student shall have the right to appeal to the Minister to consider the decision of the Council of the Faculty of Education in so far as requirements for Ministry of Education certificates are concerned.

Bachelor of Education and High School Assistants' Programs

One-Year Program leading to the Bachelor of Education Degree and to the Interim High School Assistant's Certificates

27. Bachelor of Education Degree

a The degree of Bachelor of Education will be awarded by the University of Toronto to students on successful completion of the One-Year Program which leads also to the Interim High School Assistant's Certificate, Type B, awarded by the Ontario Ministry of Education.
b A graduate of the One-Year program leading to the Interim Vocational Certificate, Type B, or the Interim Occupational Certificate, Type B (Practical Subjects), who holds an approved degree from a recognized university, who has the required number of years of wage-earning experience and who meets the other admission requirements peculiar to his subject, will be recommended also for the Bachelor of Education degree. (See Section 78.)

28. The Type B Certificate

The Ontario High School Assistant's Certificate, Type B, is awarded by the Ontario Ministry of Education, and qualifies the holder to teach academic and general subjects in the secondary schools of Ontario. The Interim Certificate may become a Permanent High School Assistant's Certificate upon completion of two years' successful teaching experience in a secondary school in Ontario.

29. Admission Requirements

The basic requirement for admission to the program leading to the Bachelor of Education degree, and to the Interim High School Assistant's Certificate, is an approved university degree from an accredited university.

The applicant's university degree program must include at least 45 credits in Arts, Science or Commerce subsequent to Grade 13, or equivalent.

The definition of a credit is derived from the basic assumption that there are approximately 60 credits in a four-year course. From this it follows that 15 credits is equivalent to a university year; and a credit may be defined as one-fifteenth of a university year.

In general, then, one university course equals three credits.

An applicant for admission to the Program for a High School Assistant's Certificate, Type B, shall make application to the Registrar, Faculty of Education, on an official form to be obtained from the Registrar. The closing date for receipt of applications is March 30, 1973.

With the completed application form, the following must be submitted:

1 *A birth certificate.* An applicant must be 20 years of age before October 1 of the year in which he applies for admission. If not born in Canada, the applicant must submit a certificate from a competent authority that he is a Canadian citizen, or has Landed Immigrant status, or has applied for Canadian citizenship. A married woman applying for admission must also submit a photostatic copy of her marriage certificate to substantiate change of name.
2 *An official transcript* showing proof of graduation from a university, after a regular university course, approved as to admission requirements and as to content of the undergraduate courses.
3 *Evidence of a negative tuberculin skin test reading or chest x-ray* taken within the year preceding September 10, 1973.
Admission acceptances must be confirmed, in writing, to the Registrar of the Faculty of Education within twenty-one days of the date of acceptance by the Faculty accompanied by a $50 deposit payable to the *University of Toronto* by certified cheque or money order. The deposit will be applied to the applicant's fee. Forty dollars ($40) of the $50 deposit will be refunded if the applicant withdraws his application, in writing, on or before July 31, 1973. The full deposit is refundable if the applicant is denied admission because of failure to graduate.

Limitation on Enrolment
In the 1973–74 One-Year Program leading to the Bachelor of Education degree, enrolment will be limited to 1300 students. Among applicants who have fulfilled the admission requirements, preference will be given to applicants with superior academic qualifications in teaching subjects for which there is a shortage of qualified teachers in Ontario secondary schools.

The Governing Council of the University reserves the right to withdraw any course listed in this calendar or to limit the enrolment.

Admission of eign Students

In a typical year, students from a dozen or more countries will be registered in the Faculty of Education. A special effort is made to welcome qualified overseas students who plan to return to their own countries on completion of their studies, and to meet their special needs insofar as the resources of the Faculty permit.
Foreign students and others *who are candidates for the Bachelor of Education degree but not for a teaching certificate of the Ontario Ministry of Education* must comply with such conditions of admission as the Council of the Faculty may determine. One of the requirements may be a Communication Test for Teaching in the English Language (See Section 16).

I. Pre-Session Observation Period

It would be helpful to all those who intend to become students in the One-Year Program of the Faculty of Education to spend a period of time in a conveniently located secondary school or elementary school (if particularly interested in the elementary education option) in order to observe the school's organization, daily routines, and espe-

cially teaching activities. The most convenient time for this observation is in the spring prior to the beginning of the autumn term of the Faculty of Education. Those interested should apply for permission beforehand to the principals of the schools which they are interested in visiting.

32. Program of Studies, One-Year Session, leading to the Bachelor of Education Degree

Program of Studies, One-Year Session, leading to the Bachelor of Education degree

Successful candidates with Canadian citizenship or Landed Immigrant status will be recommended to the Ontario Ministry of Education for the Interim High School Assistant's Certificate, Type B.

The program consists of four parts:

Part I	TEACHING SUBJECTS	TWO subjects
Part II	EDUCATIONAL THEORY	FOUR courses, including Structural and Legal Bases of the Ontario School System
Part III	PROFESSIONAL PRACTICE	TEN weeks
Part IV	ADDITIONAL RELATED COURSES	ONE course

Any deviation from this program will be granted to a student only after approval of his petition to the Council of the Faculty of Education.

Consideration will be given in the following instances:

1 the substitution of a third teaching subject for the course from Part IV

2 the substitution of a second course from Part IV for one of the three optional courses from Part II. If a candidate is given permission to take two Additional Related Courses, the two may not be under the auspices of the same Faculty department.

3 the substitution of a fourth optional course from Part II for the course from Part IV

4 the substitution of a graduate or undergraduate course in another department of the University which is relevant to one of his teaching subjects, provided that arrangements can be made with the department concerned and there is no conflict with practice teaching, for the course from Part IV. (A conflict may be avoided by taking classes in the evenings or on Saturdays.) A candidate permitted to take such a course will be subject to the regulations of the department for admission and credit.

Tuition fees will be paid by the Faculty. Applicants for such a course should apply to the Registrar, Faculty of Education, not later than August 1. (Petition is not required for Mathematics 101.)

Part I Teaching Subjects

Teaching Subjects

1 A candidate will be required to select two teaching subjects.

2 Normally, he will be required to elect *one* from list **a** and *one* from list **b**.

3 Any student may opt for *two* subjects from list **a**.

4 On petition to the Council of the Faculty, candidates with acceptable qualifications in two subjects from list **b** may be permitted to select these as their two teaching subjects. Evaluation of the candidate's credentials will be undertaken by the departments concerned, which will make their respective recommendations.

5 A student with academic qualifications for admission to courses leading to a Type A certificate or a Specialist certificate in a single teaching subject will be permitted to select his second teaching subject either from list **a** or **b**, with the consent of the departments concerned.

a Normally a candidate will be required to elect at least one of the following, for which the prerequisite is at least 2 university courses (6 credits):

English 375
French 380
Geography 385
History 405
Latin 425
Mathematics 430
Science 470

b As his second subject, the candidate may elect another subject from **a** or one of the following for which there is no prerequisite unless so indicated:

Art Education* 300 (6 university credits or background)
Business Education* 305
Computer Studies 345 (acceptance into one of the following departments: Mathematics or Science)
Counsellor Education* 355 (15 university credits in Psychology, Sociology, Economics or related fields, at least 6 or which must be in Psychology)
Dramatic Arts 485* or 480
Economics 360 (9 university credits)
Elementary Education* 365
Geology 390 (9 university credits)
German 395 (6 university credits)
Greek 400 (6 university credits)
Home Economics* 410 (15 approved university credits)
Industrial Arts* 415
Italian 420 (6 university credits)
Music* 435 (6 university credits or background)
Physical and Health Education* (Women) 440
Physical and Health Education* (Men) 445
Political Science 450 (9 university credits)

Psychology and Sociology 455 (9 university credits)
Russian 460 (6 university credits)
School Librarianship* 465
School Librarianship* 466 (accredited degree in Library Science)
Spanish 475 (6 university credits)

*Courses in these subjects lead to an additional Ministry of Education certificate (See Sections 35, 36).

NOTES:

Type A Candidates

In selecting his subjects from **a** and **b**, a candidate for the Interim High School Assistant's Certificate, Type A, must include the subject or subjects of the Type A Certificate.

Languages

German, Greek, Italian, Russian, and Spanish may be elected only by a candidate for the High School Assistant's Certificate, Type A, in these subjects, except by permission of the Council of the Faculty. A candidate should not choose a modern language unless he has oral proficiency in the language and a thorough knowledge of its grammar. He should be fully aware that the major portion of the lecturing is in the language concerned, and that he is expected to use that language in his teaching practice.

Each candidate seeking admission to a course in the Department of Modern Languages is required to take a test or series of tests as one of the criteria for admission. These tests are designed to assess the candidate's ability in the areas of comprehension (listening and reading) and expression (oral and written) in the language(s) concerned. They will be administered on announced dates preceding the candidate's final acceptance by the Faculty. Further details regarding dates may be obtained by writing to the Chairman, Department of Modern Languages, Faculty of Education.

Physical and Health Education

Part II of the Intermediate Course in Physical and Health Education or the Specialist Course in Physical and Health Education may be taken as a third subject under conditions outlined in Section 35.

Changes in Optional Subjects

The last date for changing optional subjects will be October 1, 1973; thereafter changes may be made only with the approval of the Council of the Faculty of Education.

Part II Educational Theory

Educational Theory

a All candidates will take the course Structural and Legal Bases of the Ontario School System 201

b In addition, a candidate must take six hours in Educational Theory

courses offered by the departments of Administration and Program Development, Educational Psychology, and History, Philosophy, and Sociology of Education. No more than four hours may be taken with any one department.

Administration and Program Development
Program Development 202
Program Development 203 (not offered in 1973–74)
The Individual Student and the School Program 204
Administration in the Modern School 205
Evaluation in Education 206
Individual Research Project 207

Educational Psychology
Psychology Applied to Education 230
The Adolescent – At Home, in School and in the Community 231
Teaching – An Interpersonal Process I 232
Teaching – An Interpersonal Process II 233
Individual Research Project 234

History, Philosophy, and Sociology of Education
Comparative Education 260
Experience and Education 261
Modern Philosophy and Education 262
Progressive Education in Theory and Practice 263
School and Society 264
Sociology of Education 265
Values in Education 266
Individual Research Project 267
Authority and Freedom in School 268
Issues in the History of Canadian Education 269
Cross-Cultural Education 270
Modern Philosophies and Education – Advanced Level 271
History of Educational Thought in Western Culture 272

Technical and Industrial Arts (designed for Technical Students)
Educational Psychology as it applies to Technical Education 706
History and Philosophy of Technical Education 708

Part III Professional Practice

Professional Practice
Candidates will be assigned to approved elementary and secondary schools for observation and practice teaching for ten weeks during the session. Practice Teaching is conducted under the tutelage of appointed associate teachers in cooperation with the teaching subject departments.
Any candidate absent from scheduled practice teaching duties will be required to make up the assignment at the end of the term.

Part IV Additional Related Courses

Additional Related Courses

These courses offer a candidate the opportunity to concentrate further on one of his teaching subjects by taking a related course, or to pursue an interest in another teaching subject or in the field of general education.

Administration and Program Development
Administration within the School System 125
Research Methods in Education 126

Art Education
Design Education 114
Art and the Humanities 138
Art History 145 (not offered in 1973–74)
Art Studio 146

Business Education
An Analytical Study of Promotional Techniques 152 (not offered in 1973–74)
Research and Developmental Program in Business Education 153 (not offered in 1973–74)

Computer Studies
Computers in Education 106
Educational Tests and Measurements 124

Counsellor Education
The Contemporary School Counsellor 150

Dramatic Arts
Drama in Education 147 (not offered in 1973–74)

Educational Media
Educational Media 107
Speech and Personal Communication 143

Educational Psychology
Introduction to Child Psychology 112
Principles of Programmed Learning 116
Psychology of Communications 117
Applied Learning Theory 148
Socialization and Identity 154

Elementary Education
French at the Elementary School Level* 121
Art and Crafts for Elementary Schools 130
Music for Elementary Schools 131
Physical and Health Education for Elementary Schools 132

English
The Language Arts of the Cinema 122
Developmental Reading 127
English for the Slower Learner 141
Psycholinguistics 142

Geography
Curriculum Theory and Design 104 (not offered in 1973–74)
Game Theory and Simulation in Relation to Learning 110 (not offered in 1973–74)

History, Philosophy, and Sociology of Education
Philosophy and Education in the Classical World 134 (not offered in 1973–74)
Jean-Paul Sartre and Education 135 (not offered in 1973–74)
Problems in Canadian Education 136

Home Economics
Management in Home Economics Curriculum 144 (not offered in 1973–74)

Institute of Child Study
Principles and Practices of Child Study 001

Mathematics
Mathematics 101 (University Course)
Research Project in Mathematics Education 155

Modern Languages
Applied Linguistics 102
Culture and Society in German Language Teaching 103
Electronic Aids to Language Learning 108
French at the Elementary School Level* 121
Culture and Society as they relate to the teaching of French 129
Individualization in Modern Language Programs 160

Music
Chamber Music 137

Physical and Health Education
Current Health Problems in North American Society 105
Outdoor Education 115
Affective Learning through Physical Education 151 (not offered in 1973–74)

School Librarianship
The School Library and the Subject Teacher 149

Science Education
Environmental Studies 109
Science Programs in Elementary Education 140

Technical and Industrial Arts
Introduction to Vocational, Occupational and Industrial Arts Education 113
Special Topics in Creativity 123
English: Rhetoric and Semantics 139

*This course leads to an additional Ministry of Education certificate. (See Section 70)

33. Conditions for Final Standing

The standing of candidates will be determined by the combined results of term work and of the final examinations in the subjects of Parts I, II, and IV, and by the record of Observation and Practice Teaching in Part III.

Standing in the subjects of Parts I, II, and IV will be issued as follows: A 80–100, B 70–79, C 60–69, D 50–59, F below 50.

A student who obtains 50 per cent of the marks in *each* of the courses in Parts I, II, and IV and 50 per cent in *each* of the subjects taught in Part III may be recommended by the Council of the Faculty for the Bachelor of Education degree and for the Interim High School Assistant's Certificate, Type B.

A student who passes in Part III and fails in not more than two of the courses included in Parts I, II, and IV, of which only one may be a teaching subject listed in Part I, may be exempted from further attendance, but must take supplemental examinations in the courses failed, or otherwise meet the requirements of the Department(s) concerned.

A candidate who fails in Part III of the Program will not be recommended for a Bachelor of Education degree or a High School Assistant's certificate. Such a candidate may apply for re-admission.

A candidate who fails in a one-year program listed in the Faculty of Education calendar may be re-admitted in a subsequent year, with the approval of the Council of the Faculty.

A candidate who withdraws from attendance in any program listed in the Faculty of Education calendar may apply for re-admission in a subsequent year on petition to the Council of the Faculty.

34. Supplemental Examinations

A candidate for any certificate listed in this calendar, who failed at an examination under former regulations and was exempted from subsequent attendance at the Faculty of Education will take the final examinations papers as prescribed herein, but his standing will be determined in the subjects as constituted under the regulations when he first wrote.

A candidate granted supplemental privileges may qualify for the certificate named below in one or more of the following ways, as authorized by the Council of the Faculty of Education:

H.S.A., Type B

1 by taking an examination or examinations in August at the conclusion of a summer session;

2 by otherwise satisfying the requirements of the department(s) concerned;

3 by attending the Summer Program for Teachers with Professional Education, taking only the subject(s) failed and writing the examination(s) at the conclusion of the course.

In all instances, application must be made not later than June 22.

H.S.A., Type A

1 by taking an examination or examinations in August at the conclusion of a summer session (Application must be made not later than June 22);

2 by otherwise satisfying the requirements of the Department(s) concerned (Application must be made not later than June 22);

3 by successfully completing the Type A Summer Seminar.

Type A Practical Tests

Type A candidates exempted from attendance will take their supplemental practical tests through the Faculty of Education. Application for teaching and practical tests must be made by December 31.

Second Failures

Should a student fail a second time in either or both of his supplemental examinations, he may be admitted to the Summer Session for Teachers with Professional Education choosing different optional courses if he has the required prerequisites, or he may be refused admission to further courses at the direction of the Council of the Faculty.

Additional Certificates for Students in the High School Assistants' Program, Type B

A candidate in the High School Assistants' Program, Type B, may elect as a teaching subject one of a number of courses leading to additional teaching certificates.

35. Programs and Notes

1 *Art Education*

Admission requirements are 6 university credits or background. On the successful completion of Art Education 300, a candidate may be recommended for Part I of the Intermediate Certificate in Art.

2 *Business Education*

Previous courses in business education or business experience is not required of a candidate who selects one or both teaching subjects in Business Education. A candidate without sufficient background or skills may be required to attend an evening course in one or more of the subjects in Part I.

A candidate who selects only one teaching subject in Business Education leading to Part I of the Intermediate Accountancy, Data Processing, Marketing or Secretarial certificate must take one other teaching subject. He will be required to attend one additional summer course to qualify for the Intermediate Certificate in the Business Education field concerned. A candidate who selects Parts I and II in the One-Year Program may qualify for the Intermediate Certificate.

3 *Counsellor Education*

Admission requirements are 15 university credits in Psychology, Sociology, Economics or related fields, at least 6 of which must be in Psychology. Each applicant will be required to have a personal interview with a member of the Counsellor Education Department as part of the selection process.

Candidates who receive credit for this course may be granted standing in Part I of a four-part program leading to a Guidance Specialist Certificate.

Those candidates who receive credit for this teaching subject, may, after one year of successful teaching experience in Ontario, be admitted to Part II of the Counsellor Education Summer Course.

4 *Dramatic Arts*
Each applicant will be required to have a personal interview with a member of the Dramatic Arts Department as part of the selection process.

5 *Elementary Education*
Other than the general requirements for admission to the High School Assistants' Program, Type B, there are no prerequisites for admission to Elementary Education. University courses in the arts, science, psychology, child study and sociology are considered most valuable for participation in the program.

6 *Home Economics*
Admission to the course for the Intermediate Home Economics Certificate is restricted to candidates who submit evidence of graduation with a standing not lower than 60% or C, whichever is higher, in the final year of a university program having at least five approved courses in Home Economics.

7 *Industrial Arts*
Experience or education in Industrial Arts is not a prerequisite. After successful completion of this teaching subject, a candidate may obtain the Elementary Industrial Arts Certificate by successfully completing an additional seven-week summer program.

8 *Music*
Admission requirements are 6 university credits or background. Admission to the Intermediate Instrumental Music course will be restricted to candidates for Part I of the Intermediate Vocal Music Certificate, and will be subject to the approval of the Music Department.

9 *Physical and Health Education*
There are no prerequisites for admission to the Intermediate course, Part I.
Students who meet the admission requirements may become candidates for Part II of the Intermediate Certificate in Physical and Health Education or for the Specialist Certificate in Physical and Health Education.
The admission requirement for the Intermediate course, Part II, is a minimum of six university credits in Physical and Health Education. The admission requirement for the Specialist course is a minimum of 24 university credits in Physical and Health Education (exclusive of methods courses).
Courses leading to Part II of the Intermediate Certificate and to the Specialist Certificate will be taken as a third teaching subject *in addition to* the course leading to the Interim High School Assistant's

Certificate, Type B, if a sufficient number of applications are received to warrant inclusion of these courses in the program. To be eligible, a candidate must also select the Physical and Health Education course leading to Part I of the Intermediate Certificate as one of the teaching subjects.
After successful completion of Part II of the Intermediate Certificate, a candidate may proceed to the Specialist Certificate in summer sessions but not until the candidate has completed one year of successful teaching.

10 *School Librarianship*
Each applicant will be required to have a personal interview with a member of the School Librarianship Department as part of the selection process.
This course is Part I of a two-part program leading to the Intermediate Certificate in School Librarianship. After successful completion of the Intermediate Part I course and one subsequent year of successful experience in a school library, a candidate may proceed to a summer session to complete the requirements for the Intermediate Certificate in School Librarianship. After successful completion of the Intermediate Certificate and one subsequent year of successful experience in a school library, a candidate may proceed to a further summer session to complete the requirements for the Specialist Certificate.

36. Recommendation of Additional Certificates

Art Education, Business Education, Counsellor Education, Dramatic Arts, Elementary Education, Home Economics, Industrial Arts, Music, Physical and Health Education, School Librarianship
On the recommendation of the Council of the Faculty, one of the following additional certificates or credits may be granted to a candidate in the Program for a High School Assistant's Certificate, Type B, provided that the student is awarded the High School Assistant's Certificate, Type B:
Part I of the Intermediate Certificate in Art
Part I or Parts I and II of the Intermediate Certificate or Specialist Certificate in a Business Education subject (Accountancy, Data Processing, Marketing, Secretarial)
Credit Part I of the program leading to the Specialist Certificate in Dramatic Arts (Course 485)
Elementary School Teacher's Certificate, Standard 4
Credit Part I of the program leading to the Specialist Certificate in Guidance.
Intermediate Certificate in Home Economics
Credit Part I of a two-part program leading to the Elementary Certificate in Industrial Arts
Part I of the Intermediate Certificate in Vocal Music
Part I of the Intermediate Certificate in Vocal and Instrumental Music

Part I of the Intermediate Certificate in Physical and Health Education*
Part II of the Intermediate Certificate in Physical and Health Education*
Specialist Certificate in Physical and Health Education*
Part I of the Intermediate Certificate in School Librarianship

*On recommendation of the Council of the Faculty, Part II of the Intermediate Certificate in Physical and Health Education may be granted to a candidate who achieves the standard for Part I of the Intermediate Certificate and who obtains 50% of the marks assigned to the written examinations and practical tests of the course leading to Part II of the Intermediate Certificate. The Specialist Certificate may be granted to a candidate who achieves the standard for Part I of the Intermediate Certificate and who obtains a rating of Good in the Observation and Practice Teaching in the course and a grade of B in the written examinations and practical tests of the course leading to a Specialist Certificate.
Ontario Teachers' Aquatic Standard – A candidate who is exempted by a medical certificate from a course in aquatics or a candidate who has failed to meet the aquatic standard may be awarded a certificate in Physical and Health Education endorsed 'without aquatics'. A candidate who meets the aquatic standard may be awarded a certificate endorsed 'Credit O.T.A.S.'.

Requirements for Candidates recommended for a Ministry of Education Certificate

A candidate for one of the following additional certificates who has met the other requirements of the Type B certificate but has failed to obtain pass standing in the remainder of the course may earn pass standing and be recommended for standing by following the conditions listed below:

1 In *Art, Vocal Music or Instrumental Music*, a candidate who fails in not more than two subjects of the written and practical tests may complete his standing by passing in the subjects concerned at a subsequent examination without further attendance, but in the subjects of the practical tests such a candidate must pass tests by arrangement approved by the Council of the Faculty. Any other candidate who fails shall repeat the course for standing.

2 In *Business Education*, a candidate who fails in the written or practical tests in not more than two subjects may complete his standing at a subsequent examination or by attendance at a subsequent Summer Session.

3 In *Counsellor Education*, if a candidate fails to achieve a passing standard, the course must be repeated in a subsequent Summer Session.

4 In *Dramatic Arts*, a candidate who fails to achieve the passing standard will normally be required to fulfil the requirements by attending a summer program selected by the Dramatic Arts Department.

5 In *Elementary Education*, a candidate failing in one or more subjects of the Elementary Education Program may write the supplemental examination(s) in August.

6 In *Home Economics*, a candidate who fails in the written examinations but passes in all the subjects of the term work may complete her standing by passing in the written examination at a subsequent date without further attendance. A candidate who passes in the written examinations but fails in one or more of the subjects of the term work may obtain her standing by completing successfully the Home Economics option of the High School Assistants' Type B Summer Program for Teachers with Professional Education. Any other candidate who fails shall repeat the course for standing.

7 In *Industrial Arts*, a candidate who fails in the written examinations but passes in all the subjects of the practical tests may complete his standing by passing in the written examination at a subsequent date without further attendance. A candidate who passes in the written examinations but fails in one or more of the subjects of the practical tests may obtain his standing by completing successfully a subsequent summer course under conditions to be determined by the Council of the Faculty. Any other candidate who fails shall repeat the course for standing.

8 In *Physical and Health Education*, if a candidate fails to achieve the passing standard, the course must be repeated in a subsequent Summer Session.

9 In *School Librarianship*, a candidate who fails to obtain a passing standing in the term work and written examinations in all subjects will normally be required to repeat the course for standing in a subsequent summer session. However, a candidate who fails only in Organization of Materials may be allowed to complete his standing by passing a written examination in this subject at a subsequent date without further attendance, or may be required to repeat this subject in a subsequent summer session, whichever is decided by the School Librarianship Department.

he Elementary hool Teacher's Certificate

In order to qualify as a teacher in both elementary and secondary schools in Ontario, a candidate may elect as one teaching subject a program leading to the Interim Elementary School Teacher's Certificate.

. Conditions of Admission

1 Candidates shall comply with the conditions of admission and attendance prescribed for candidates of the High School Assistants' Program, Type B.
2 Applicants should note that no candidate will be awarded an Interim Elementary School Teacher's Certificate before he is awarded an Interim High School Assistant's Certificate, Type B.
3 Candidates should have a university background with breadth in the arts, science or languages together with courses in psychology, sociology or child study.

40. Program of Studies

Because the Program for the Elementary School Teacher's Certificate offers instruction in a group of courses, the total lecture time is *ten hours per week*, including a course in Additional Related Courses. This fact should be considered carefully when the candidate is selecting subjects in the High School Assistants' Program, Type B.

The Elementary Education Program 365 consists of the following courses and activities:

PART I
Compulsory Courses:
366 English for Elementary Schools (2 hours)
367 General Methods and Management Home Room (1 hour)
368 Mathematics for Elementary Schools (2 hours)
369 Science for Elementary Schools (1 hour)
371 Social Studies for Elementary Schools (2 hours)
and at least *one* of the following Additional Related Courses:

121 *French at the Elementary School Level** (2 hours). French as a second language from the earliest grades of the elementary school; programs; procedures specific to the age level; audio-visual aids. Candidates able to satisfy the admission requirement of the Depart-

ment of Modern Languages may take this course in lieu of Art, Music or Physical Education.
Successful completion of this course leads to a certificate of the Ministry of Education, "Certificate as Teacher of French to English-speaking Pupils in Elementary Schools" for candidates enrolled in both the Elementary Education Program and French.

130 *Art and Crafts for Elementary Schools** (2 hours). An introduction to the creative use of media in two and three dimensions; basic design, point, line and shape; print-making; teaching methods; subject integration.

131 *Music for Elementary Schools** (2 hours). A study of contemporary approaches to music learning in elementary schools. Student teachers in this course will be required to participate in a variety of activities.

132 *Physical and Health Education for Elementary Schools** (2 hours). A critical examination of teaching procedures which relate specifically to the aims of Physical and Health Education; an activity course based on participation in and examination of games, gymnastics and dance appropriate for the healthy development of children ages 6 to 14.

*Enrolment preferences will be given to candidates registered in the Elementary Education Program.

PART II
Observation and Practice Teaching (five or six weeks) in selected elementary school classrooms of Metropolitan Toronto. Such weeks are included within the ten weeks of Observation and Practice Teaching required of all students in the Program for the High School Assistant's Certificate, Type B.

41. Supplemental Examinations

A candidate failing in one or more subjects of the Elementary Education Program may write the supplemental examination(s) in August.

42. Evaluation of Student Progress

The evaluation of student achievement in subjects of the Elementary Education Program is conducted by each of the Faculty departments involved: English, Geography, History, Industrial Arts, Mathematics, Modern Languages, Music, Physical and Health Education, Science, Elementary Education (Home Room). Methods of evaluation vary from department to department and encompass a wide range of testing instruments: performance tests, oral tests, essays, exercises, research assignments, seminars, objective tests and examinations. Each department advises students, in writing, regarding the specific nature of its own evaluation procedures.

One-Year Program for the High School Assistant's Certificate, Type A, and Specialist Certificate in Business Education

13. The Type A Certificate

In general, candidates entering this program must hold an approved degree after a four-year university course following Ontario Grade 13, or equivalent, and graduation with at least second class standing.

The Interim High School Assistant's Certificate, Type A, qualifies the holder for five years as an assistant teacher of academic and general subjects in the secondary schools of Ontario.

The Interim Type A Certificate may become a Permanent High School Specialist's Certificate upon the completion of two years' successful teaching experience in Ontario on which the applicant has been graded as above average on subjects covered by the certificate. The Permanent High School Specialist's Certificate qualifies the holder to become head of a department in a secondary school.

Conditions of Admission

1 A candidate for a High School Assistant's Certificate, Type A, shall comply with the conditions of admission prescribed in the Ministry of Education Memorandum 1970–71: 51. Advice about these requirements as they apply to an individual candidate may be had upon enquiry to the Office of Advanced Standing.

2 An applicant for admission to the Program for the High School Assistant's Certificate, Type A, shall be an applicant for admission to the Program for the High School Assistant's Certificate, Type B.

3 No candidate will be awarded a High School Assistant's Certificate, Type A, *before* he has been awarded a High School Assistant's Certificate, Type B.

15. Recommendation of Type A Certificates

Subject to the condition that no student may be awarded a High School Assistant's Certificate, Type A, who does not already hold or is not also awarded a High School Assistant's Certificate, Type B, the final standing of a candidate in attendance in the High School Assistants' Type A program will be decided by (a) the combined results of the term work and the final examination in the department or subject concerned, and (b) by the practical work based on a candidate's performance in Type A seminars as well as practice teaching experience as recommended by the department(s) concerned.

The pass mark is second class honours (B standing) in the final examinations (including sessional records) and a rating of Good on the marks assigned to the practice teaching in the Type A subject(s).

46. The Specialist Certificate in Business Education

Business Education

There is no Type A program in Business Education subjects, but a program leading to a Specialist Certificate in Business Education is provided.

Academic Requirements

1 *Accountancy Specialist Certificate*

Admission to the program leading to the Accountancy Specialist Certificate will be granted to students who hold the degree of Bachelor of Commerce from an Ontario university, or an equivalent degree from another province or country, with a standing of at least 60% or C, whichever is higher, and who are otherwise qualified to enter the High School Assistants' Program, Type B. The student will later be required to try a supplemental examination in any of the required subjects in which he has obtained less than 70% or B standing, whichever is higher. The required subjects are the university equivalents of: Introductory Accounting, Accounting I, Accounting II, Law, and Economic Principles.

2 *Data Processing Specialist Certificate*

Admission to the program leading to the Data Processing Specialist Certificate in Business Education subjects will be granted to students who hold a Bachelor of Arts or equivalent degree with a standing of 60% or C, whichever is higher, and who have taken university courses in the required subjects or who can qualify by tests on these subjects. The required subjects are: Introductory Accounting, Computer Concepts, Introduction to Problem Solving, Business Data Systems, Advanced Problem Solving and Management Information Systems.

3 *Marketing Specialist Certificate*

Admission to the program leading to the Marketing Specialist Certificate in Business Education subjects will be granted to students who hold the degree of Bachelor of Business Administration from an Ontario university or an equivalent degree with a standing of at least 60% or C, whichever is higher, and who are otherwise qualified to enter the High School Assistants' Program, Type B. The student will be required to try a supplemental in any of the required subjects in which he has obtained less than 70% or B standing, whichever is higher. The required subjects are: Introductory Accounting, Introductory Marketing, Business Organization and Management, Economics, Marketing Principles and one additional Marketing course.

4 *Secretarial Specialist Certificate*

Admission to the program leading to the Secretarial Specialist certificate will be granted to students who hold the degree of Bachelor of Arts in Secretarial Science from an Ontario university or an equivalent degree with a standing of at least 60% or C, whichever is higher, and who are otherwise qualified to enter the High School Assistants' Program, Type B. The student will be required to try a supplemental

in any of the required subjects in which he has obtained less than 70% or B standing, whichever is higher. The required subjects are the university equivalents of Typewriting, Introductory Stenography, Applied Stenography, Office Practice, Office Procedures, Economic Principles, and Secretarial Science I and II.

Supplemental Examinations

Information regarding supplemental examinations is found in Section 34.

48. Institute of Child Study

*Diploma in Child Study**

Qualified students may participate in the academic program of the Institute under one of the following arrangements:

1 *As a full-time student* enrolled for two years in programs in Early Childhood Education, or Childhood Assessment and Counselling: awarded the Diploma in Child Study by the University of Toronto.

2 *As a full-time student with three or more years' prior teaching experience* enrolled for one year in special programs in Early Childhood Education or Childhood Assessment and Counselling: awarded the Diploma in Child Study by the University of Toronto.

3 *As a graduate student from another department* attending courses or making use of the Institute's research facilities by arrangement through his department.

4 *As a special student* enrolled in one or more courses.

Diploma Program in Child Study

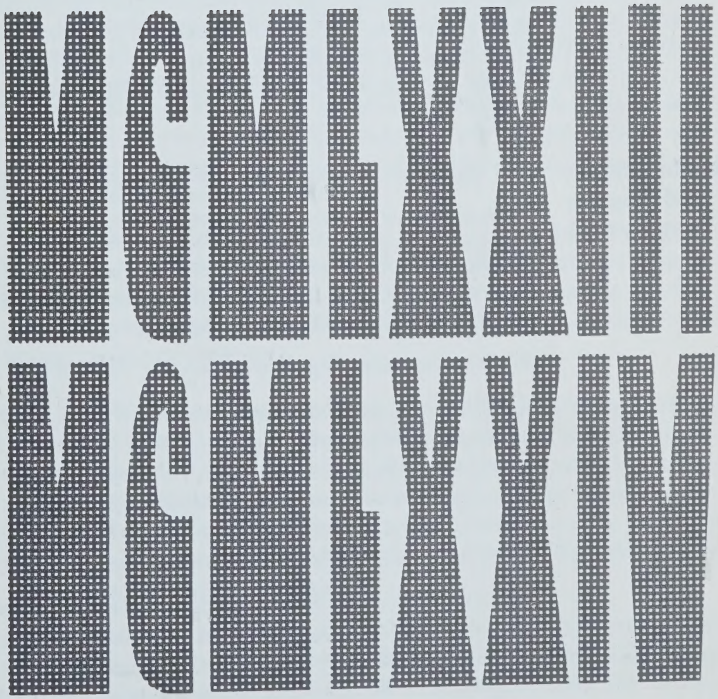
The University of Toronto awards a Diploma in Child Study to students who complete a full program of studies as prescribed.

The program is intended for men and women who plan to specialize in the child field and includes intensive study in foundation and applied subjects.

Requirements for Admission to the Diploma Program: a Bachelor's degree with B standing, or professional teacher qualifications with three or more years' teaching experience in addition to a Bachelor's degree and academic and professional standing as approved by the Admissions Committee.

Course Regulations for the Diploma in Child Study: In order to qualify for the Diploma in Child Study a student must successfully complete fourteen course credits, including all courses required by his program. Teachers with three or more years' teaching experience may complete programs in Childhood Assessment and Counselling or Early Childhood Education in one year with seven credits. One course credit is given for a standard course requiring two hours per week of lectures plus readings, projects and, in some cases, field work.

*A separate calendar of the Institute of Child Study is available to students who wish more details about the Diploma Program and the description of courses offered.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Details of Courses in Programs leading to the Bachelor of Education Degree and to the Interim High School Assistant's Certificate and Additional Certificates

In each case, the numeral in brackets indicates the number of lecture hours per week.

49. Required Course

All students proceeding to the Bachelor of Education degree and to the High School Assistant's Certificate, Type B, will be required to take:

201 *The Structural and Legal Bases of the Ontario School System* (1 hour). The organization of provincial and local systems of education; powers and duties of the various educational authorities; the Education Acts and Regulations of the Province of Ontario. Course content will be covered primarily through directed readings.

Lectures will be held from time to time on related topics of current educational interest but it is essential that all students attend one of the organizational lectures held early in the academic year.

The course is conducted by the staff of the Department of Administration and Program Development on behalf of the Faculty of Education.

50. Administration and Program Development

400 *Administration and Program Development*

Courses offered in Part II Educational Theory

202 *Program Development* (2 hours). An examination of current theory and practice in curriculum design and their relationship to teaching and school organization.

203 *Program Development* (4 hours). Not offered in 1973–74.

204 *The Individual Student and the School Program* (2 hours). School programs and practices which meet individual differences among students. A general study will be made of innovative teaching and organizational patterns, including particularly the non-graded school, credit organization, house plans, team teaching, independent study, and other related topics.

205 *Administration in the Modern School* (2 hours). A practical study of the use and organization of school resources and services in providing an effective educational program. Emphasis will be placed on the role of the teacher in phases of school operation such as disci-

pline, staff relationships, organization of classes, individualizing instruction, evaluation procedures, and the design and implementation of overall school programs.

206 *Evaluation in Education* (2 hours). A study of current evaluation practices in the schools. The course will develop some of the theoretical issues underlying evaluation methods, the design and marking of a wide variety of testing instruments, including essay, objective, oral, project, and self-assessment. The fair assessment of individuals, comprehensive systems for schools, distinctions between subjects, home reporting, concepts of promotion and failure, and grading systems will also be considered.

207 *Individual Research Project* (2 hours). A student who wishes to engage in an individual research project must obtain the approval of the Department before electing this course by: (a) submitting a brief proposal acceptable to the Department, and (b) showing evidence of research skills appropriate to the area of study. The privilege of submitting an individual research project is not open to extramural candidates.

Courses offered in Part IV, Additional Related Courses

125 *Administration within the School System* (2 hours). A review of planning and administrative procedures in large systems of education. Particular emphasis will be given to the organization of learning resources, student services, and parent-teacher-student relationships. The interaction of trustees, senior officials, resource personnel, and school administrators will be considered. The effectiveness of large systems in formulating and in achieving desirable educational programs for the individual student and for society as a whole will provide a constant focus for study.

126 *Research Methods in Education* (2 hours). A course introducing students to methods of research used in Education. Emphasis will be directed to research in Educational Administration and Program Development. During the course students will develop a research project of their own.

51. Art Education

300 *Art Education* (8 hours). Three major areas of study: history, philosophy and current practice of Art Education (2 hours); instruction and practice in two- and three-dimensional design in various media, with emphasis on classroom methods and the teacher's own artistic development (4 hours); history of the visual arts, chiefly in Canada, with emphasis on use of local resources as the basis of study in secondary schools (2 hours).

0100 *Seminar in Art Education* (4 hours). For Type A candidates in Art. The development of curricula for senior classes; facilities and administrative arrangements for art education; advanced experi-

ments with art media; examination of aesthetic theories; historical research; the leadership role of the specialist teacher and department head.

Courses offered in Part IV, Additional Related Courses

114 *Design Education* (2 credit hours). A lecture-studio course which examines problems presented to the artist by the machine production of industrial society. The impact of technological developments upon environment; the solutions which have been formulated; tentative explorations of problems presented by recent developments. This course is offered in conjunction with the Technical and Industrial Arts Department.

138 *Art and the Humanities* (2 hours). An examination of the relationships between Art, Literature and Music in Western civilization.

145 *Art History* (2 hours). Not offered in 1973–74.

146 *Art Studio* (2 credit hours). Instruction and practice in various art media, for the teacher's own artistic development as well as classroom application. (May *not* be taken in combination with Art Education 300.)

52. Business Education Courses for the Intermediate Certificate

305 *Business Education*

1 Accountancy Program

a *one option*	**b** *two options*
Intermediate Part I	*Intermediate Part I*
Introductory Accounting 309	plus
	Intermediate Part II
Typewriting 307	Business Teaching 316
	Applications of Accounting 317

2 Data Processing Program

a *one option*	**b** *two options*
Intermediate Part I	*Intermediate Part I*
Introductory Accounting 309	plus
	Intermediate Part II
Typewriting 307	(See Computer Studies Section 53)

3 Marketing Program

a *one option*	**b** *two options*
Intermediate Part I	*Intermediate Part I*
Introductory Accounting 309	plus
	Intermediate Part II
Introductory Marketing 314	Business Teaching 316
	Related Marketing Concepts 326

4 Secretarial Program

a *one option*
Intermediate Part I
Typewriting 307
Introductory Stenography 312

b *two options*
Intermediate Part I
plus
Intermediate Part II
Business Teaching 316
Office Procedures 324

urses for the Specialist Certificate

1 *Accountancy Specialist*
Accounting 337

2 *Data Processing Specialist*
(See Computer Studies Section 53)

3 *Marketing Specialist*
Marketing 339

4 *Secretarial Specialist*
Secretarial Science 338

escription of Business Education Courses

307 *Typewriting* (3 hours). The development of a basic facility in typewriting, the application of this facility and the problems of teaching the junior grades in the secondary school.

309 *Introductory Accounting* (3 hours). To acquaint students with general accounting fundamentals including general bookkeeping practices and basic accounting concepts, and the teaching of this in the secondary school.

312 *Introductory Stenography* (3 hours). A course in the theory and application of Pitman Shorthand including consideration of the theoretical aspects of high speed writing and the teaching methods, approaches, and practices currently in use in the schools. The course includes the investigation and practices of advanced teaching techniques.

314 *Introductory Marketing* (3 hours). A course surveying the total distribution process with particular emphasis on the Canadian retail organization. The study will be consumer oriented.

316 *Business Teaching* (1 hour). A course in the fundamental philosophies pertaining to the instruction of Business Education subjects; specialized applications to the individual subject areas; the correlation of all business subjects.

317 *Applications of Accounting* (3 hours). The development of a basic facility in the use of business machines and a knowledge of the organization, law, financing and computerization of a business.

324 *Office Procedures* (3 hours). A practical course in the teaching of stenographic techniques including the practices and procedures followed in the modern office.

326 *Related Marketing Concepts* (3 hours). A survey of the peripheral aspects of marketing, both from a content and methodological viewpoint; the functional aspects of business and a study of distribu-

tive processes; the practical implications of marketing mathematics as related to business machine applications.

337 *Accounting* (1 hour). Accounting for partnerships, corporations, departments and manufacturing and the methods of presenting these topics.

338 *Secretarial Science* (1 hour). A course in advanced stenographic and secretarial practices; the organization and preparation of modern office practices and procedures including current and advanced teaching techniques and procedures.

339 *Marketing* (1 hour). The principles of teaching marketing subjects as they apply to the upper grades of the Business Education course; practical applications and their relevance to the individual in our consumer-oriented society.

Courses offered in Part IV, Additional Related Courses

152 *An Analytical Study of Promotional Techniques* (2 hours). Not offered in 1973–74.

153 *Research and Developmental Program in Business Education* (2 hours). Not offered in 1973–74.

53. Computer Studies

345 *Computer Studies*

Required:
Computer Concepts 346
Introduction to Problem Solving 347
Computer Studies Principles and Practices 348

For Business Education candidates wishing to obtain a Data Processing Specialist Certificate, the following additional courses are required:
Advanced Problem Solving 349
Business Data Systems 351
Management Information Systems 352

For a candidate who has successfully completed university courses equivalent to 346 and 347, one of the following courses will be substituted:
Advanced Problem Solving 349
Computer Applications 353

346 *Computer Concepts* (3 hours, September–December).
Basic computer concepts, flowcharting techniques, computer terminology, equipment peripheral to the computer system and information flow through a computer system; emphasis on problem solving techniques using the computer.

347 *Introduction to Problem Solving* (3 hours, January–April).
A course using the computer as a problem solving tool; students in-

troduced to a high level programming language, as a vehicle of communication, and problem solving through flowcharting, coding, testing and debugging. (Prerequisites: Computer Concepts or Departmental Consent)

348 *Computer Studies Principles and Practices* (3 hours).
The problematic approach to the teaching of computer concepts and computer programming; exploration of the "hands-on" versus "theory" and the "hypothetical computer" versus "actual hardware" approach. Topics to be discussed: transfer of learning from one computer to another; optimum class size; available teaching aids; motivation techniques; evaluation; course objectives. (Prerequisites: Computer Concepts or Departmental Consent)

349 *Advanced Problem Solving* (3 hours).
Opportunities provided for the students to use the computer to solve more advanced problems. In addition to the basic documentation requirements, the students will be required to design the necessary input/output documents, and prepare and update suitable data files. (Prerequisites: Introduction to Problem Solving or Departmental Consent)

351 *Business Data Systems* (3 hours).
Organization of a business, management control and the flow of information through the business; emphasis placed on the flowcharting of some of the main business systems with suitable documentation, record layout and forms design; use of unit record equipment in a computer environment. (Prerequisites: Introduction to Problem Solving or Departmental Consent)

352 *Management Information Systems* (3 hours).
Students are expected to apply systems knowledge to the solving of a case study. They will be required to design, flowchart, program and document a complete system. Students will also be required to implement aspects of their recommendations. (Prerequisites: Business Data Systems or Departmental Consent)

353 *Computer Applications* (3 hours). Students will be required to participate in directed research projects in education involving Computer Studies and their other teaching subject(s). (Prerequisites: Advanced Problem Solving or Departmental Consent)

0600 *Seminar in Computer Studies* (4 hours). For Type A candidates in Computer Science. A course designed to explore the principles and practices of teaching computing in the secondary schools. Topics to be discussed: the use of introductory languages, elements of problem design and problem solving, individual student differences, the use of the computer as an instructional tool, and effect of computer studies on other classroom studies.

Courses offered in Part IV, Additional Related Courses

106 *Computers in Education* (2 hours). A course designed to study the use of the computer as an instructional and administrative aid in education. Areas to be discussed include: computer-assisted instruction, test scoring, item analysis, curriculum, educational research, student accounting and other student-oriented areas. Emphasis is on the computer as a problem-solving tool. Prior computer courses or knowledge is not required. Access to the computer centre will be available to students for class-assigned and other approved projects.

124 *Educational Tests and Measurements* (2 hours). A course emphasizing the practical approach to tests and measurements. Students will be required to construct tests and use the computer to evaluate their results. Other areas of study include: techniques of measurement; test construction; application of testing; concepts of educational measurement. Computer training or experience not essential.

54. Counsellor Education

355 *Counsellor Education* (6 hours). Counselling theory and practice; assembling educational and occupational information for student use; assessment procedures; group methods and processes; foundations of counselling.

Course offered in Part IV, Additional Related Courses

150 *The Contemporary School Counsellor* (2 hours). An examination of the role of the counsellor in the school and current issues in guidance and counselling. Topics include: the guidance movement; philosophical and sociological foundations of guidance, the counsellor as a consultant; the counsellor's relationship to the community; ethical and legal responsibilities of the counsellor; accountability and counsellor performance; current social problems and counsellor response; the counsellor and the changing world of work. Limited to students not enrolled in Counsellor Education.

Winter Evening Courses

Dates: October 1, 1973 to May 1, 1974
Program: Parts I and IV of the Counsellor Education Programs as described in the Counsellor Education booklet *may* be offered to a limited number of candidates seeking the Guidance Specialist Certificate.
Application forms must be completed and returned along with necessary documents not later than August 1, 1973, to The Director, Winter Evening Courses in Counsellor Education, Faculty of Education, 371 Bloor Street West, Toronto M5S 2R7.

55. Dramatic Arts

480 *Dramatic Arts, Introductory Course. Improved Drama Production* (4 hours). An introductory course which concerns itself

both with improvisational and scripted drama as well as with theatre production. Through exercises in sense awareness, movement and play-making, possibilities for expanding imagination and conceptual development are explored. The course concerns itself with improvisation as a means of personal development and as a learning technique. It is primarily designed as a beginning course for the teaching of Dramatic Arts. Candidates wishing to work toward the Specialist Certificate in Dramatic Arts will be required to complete successfully three subsequent summer sessions.

485 *Dramatic Arts, Drama and Communication Arts* (9 hours, and, in addition, regular evening and weekend workshop sessions). A course dealing with the philosophy and practice of Drama in Education; the purposes of curricular and extra-curricular drama; creative drama; direction; production; study in the imaginative concepts and structures of the aural and visual media; planning developmental programs; mixed media presentations. This course consists of group projects frequently culminating in performance. Candidates wishing to work toward the Specialist Certificate in Dramatic Arts will be required to complete successfully two subsequent summer sessions.

0700 *Seminar in Drama* (2 hours). For Type A candidates in Dramatic Arts. An individual research project concerning Drama in Education, selected by the candidate in consultation with the Dramatic Arts Department.

147 *Drama in Education* (2 hours). Not offered in 1973–74.

56. Economics

360 *Economics* (4 hours). A series of lectures and seminars on the content of modern economics and its effective communication at the secondary school level. Emphasis will be on the refining of participants' understanding of the principles of economics and on the development of an issues-oriented program to make this subject matter accessible to secondary school students.

0900 *Economics* (4 hours). For Type A candidates. An intensive study of the principles and methodology of modern economics relevant to the development of practical secondary school programs in this discipline. A model learning program will be critically analyzed and portions of it presented for group evaluation on the basis of clarity, precision, and appeal. Preparation of an instructional plan for a major unit of one of the courses proposed in the current Ministry of Education Guideline for economics.

57. Educational Media

Courses offered in Part IV, Additional Related Courses

107 *Educational Media* (2 hours). A study of the basic principles of communication; the use of the various media such as film projectors, tape recorders and television will be a major part of the course.

143 *Speech and Personal Communication* (2 hours). A course directly related to the needs of the teacher as speaker and listener in the classroom. It stresses effective projection of the voice, speech development in the student, the influence of technology on speech communication. This course is offered to students in the one-year Bachelor of Education Program only.

58. Educational Psychology

Educational Psychology

Courses offered in Part II, Educational Theory

230 *Psychology Applied to Education* (2 hours). Open to all students. Designed to show relevance of general Psychology to teaching. Provides an overview of the areas of Psychology related to education and teaching; problems in human communication, role of feedback, non-verbal communication, mass media, television, radio. Modern theories of learning will be examined and compared; the relevance of learning theory to motivation, aptitudes and attitudes, learning discrimination and skills, the slow learner, development, maturation and special education, research in education, programmed learning and computer-assisted instruction.

231 *The Adolescent – At Home, in School and in the Community* (2 hours). The adolescent period; adolescent needs and processes of adjustment; the adolescent and social class; adolescent-adult relationships; the adolescent and his peer group; physical development; intellectual development; development of interests, attitudes and values; heterosexual development of adolescents; adolescent disciplinary problems; adolescent delinquency.

232 *Teaching – An Interpersonal Process I* (2 hours). The teacher as partner in an interpersonal learning process; increased awareness and insight about forces operating in groups; how one's own behaviour affects group productivity; application of theory to development of innovative plans for better classroom teaching using large and small groups.

233 *Teaching – An Interpersonal Process* II (4 hours). A course planned for students who wish to pursue in greater depth the areas of study included in Course 232. In addition, it will include enquiry into the principles of sensitivity training and the various types of encounter groups, and the way in which experience in small group living will increase the awareness of the forces affecting the teacher and the student in the school situation. Increased self-understanding and the ability to structure the social environment for the improvement of learning are among the goals of this course.

234 *Individual Research Project* (2 hours). A student who wishes to engage in an individual research project must obtain approval of the Department before electing this course by: (a) submitting a brief

proposal acceptable to the Department, and (b) showing evidence of research skills appropriate to the area of study. The privilege of submitting an individual research project is not open to extramural candidates.

Courses offered in Part IV, Additional Related Courses

112 *Introduction to Child Psychology* (2 hours). Motivation; why children learn; physical characteristics and school behaviour; children's abilities; children as social creatures; personality adjustment.

116 *Principles of Programmed Learning* (2 hours). Preparing and structuring objectives; programming styles; linear and branching; principles of writing and revising programs; feedback; computer-assisted instruction; program evaluation.

117 *Psychology of Communications* (2 hours). A course dealing with the field of communications as a Behavioural Science. It is concerned with such areas as persuasion and dissuasion; information – storage, retrieval and generation; loss of message – interpersonally and in the formal and informal learning situations; media – limitations of and possible uses of – in educational systems; societies' and institutions' ability to generate meaningful information. One of the aims in this course is to assist the students to cope with increasing amounts of information available and to cope with increasing complexity rather than avoid it.

148 *Applied Learning Theory* (2 hours). An in-depth study of theories of learning; factors affecting learning and retention; applications to classroom situations and to special education problems. (May not be taken in conjunction with *Psychology Applied to Education* 230.)

154 *Socialization and Identity* (2 hours). An examination of the various theories in social psychology contributing to an understanding of human social development; an exploration of the development of individuality and group identities along with the factors of social interaction influencing the development of personality. Emphasis will be placed on contributions to personal growth made by teachers and schools at elementary and secondary levels.

Elementary Education

365 *Elementary Education.* For Details of Courses, see Section 40.

59. English

375 *English* (4 hours)

LITERATURE:

Values inherent in the study of good literature; basic approaches; various methods of presenting such literary forms as the poem, the drama, the essay, the short story, and the novel; the choosing of suitable textbooks for pupils of different abilities and levels; plan-

ning courses of study; evaluating students' progress; oral and supplementary reading; problems related to the teaching of English literature.

COMPOSITION:
The basic aim in teaching composition; place and treatment of grammar, rhetoric, logic and word study in the teaching of composition; principles to be followed in arranging courses; studying models; assigning, planning, evaluating and correcting compositions; improving the pupil's oral English; conducting class discussions; problems related to the teaching of English composition.

MEDIA:
The basic aim in treating mass media; objectives; categories; procedures.

ELECTIVES:
Creative thinking; developmental reading; creative drama; screen education; group dynamics; creative writing; mass media; psycholinguistics; English as a second language; English in the nongraded school.

1100 *Seminar in English* (4 hours). For Type A candidates in English.
Teaching and discussion of selected topics; the English specialist; the Head of the Department; new methods; sequential programming; thematic study; comparative techniques; enrichment; acceleration; the slow learner; educational television; the new grammar; works in translation; remedial and developmental reading; advanced and general courses; mass media; creative thinking; creative writing; professional development; the nongraded school; the future of English studies.

Courses offered in Part IV, Additional Related Courses

122 *The Language Arts of the Cinema* (2 credit hours). A course designed to study trends in contemporary cinema. Although the course concentrates mainly on feature films of such directors as Hitchcock, Bergman, Varda, Antonioni, Fellini, Godard, Truffaut, Resnais, Losey, and Lester, it does not neglect the popular cinema nor does it omit experimental short films. The several arts of the director, script writer, actor, editor, lighting-cameraman, composer, and sound man are studied so that the students may have a full appreciation of the language arts amalgam that we experience in the cinema.

127 *Developmental Reading* (2 hours). A course designed to introduce students to the possibilities of developmental reading at the secondary school level. Basic principles underlying an instructional program will be discussed. Specific methods of determining reading achievement, selecting patterns of organization, and planning the

instructional program, will be introduced. Of major emphasis will be the devising of practical developmental reading programs.

141 *English for the Slower Learner* (2 hours). Primarily a course dealing with the development of effective programs for slower learners at the secondary school level. Specific methods of instructing such pupils will be emphasized: their needs, interests, and abilities will be explored. Careful examination of perception, reading, speaking, listening and writing skills, will be stressed. Students will investigate the nature and validity of both reading and intelligence tests as they apply to the slower learner.

142 *Psycholinguistics* (2 hours). A course designed to explore the psychological, biological, and sociological parameters of language as a communication system. Some of the main areas of investigation are: language acquisition in children; psychological models of language learning; linguistic models of grammar; general semantics; non-verbal modes of communication; language games; language study programs in the school (history of grammar, dictionaries and writing systems, language history, etymology, morphology); language and thought; language as a sociological determinant. Special attention will be given to the construction of language units for classroom study.

0. Geography

385 *Geography* (5 hours). Listed below are a number of Geography course units designed to give a degree of flexibility in the preparation of Geography teachers. These units have been designed to meet the demand for professionally trained people who are either

i graduate Geographers (Type A candidates), or
ii other University graduates (Type B candidates)

and who will proceed to a career in education, either as a specialist teacher of Geography, or as one who wishes to teach Geography together with other subjects. Because the department uses a team approach, two or more members of staff may be concerned with each unit.
Obligatory final examination for all candidates in courses 385, 371, and 1500 will be held at the end of the course in late April or early May. In assessing each candidate the Geography staff will utilize a number of reports, seminar papers, essays, units and exercises. Term work is an important factor and accounts for approximately 60 per cent of the final grade.

Geography: Orientation. The scope of the role of the Geography teacher; styles of learning and their relationship to the teaching of Geography and learner characteristics.

Geography: Curriculum Planning. Recognition of a curriculum framework as a general context within which the strategies for achieving educational objectives in the classroom may be discussed;

the identification and relationship of the components of curriculum in a variety of contexts, e.g. classroom and field, and at a variety of scales, e.g. program, unit, lesson.

Geography: Instructional Techniques and Procedures. Recognition, analysis and construction of learning experiences in geography in order to understand how educational objectives are achieved; the study of various resource materials and their relationship to strategies, techniques, and objectives in geography; analysis of geographic approaches, e.g. regional systematic, thematic, etc.

Geography: Educational Measurement and Evaluation. A study of ways to evaluate the effectiveness of learning experiences.

Geography: Field Studies. Integration of the objectives and techniques of 'landscape' study.

371 *Elementary Social Studies* (for students in the Elementary Education program). Curriculum Planning at the Program Scale; relationship of social sciences to provincial programs. Curriculum development at the unit and lesson scale: experience and analysis of at least three strategies for learning in relation to styles of thinking. The examination of resources and specialized techniques at the lesson scale. The application of the above to time and space studies in the classroom and the field.

1500 *Seminar in Geography Curriculum Design* (4 hours). For Type A candidates in Geography. Candidates will meet as a special class in a program concerned with the study of Principles of Curriculum Design as models for the development of geography curricula which meet the various future conditions and variables in education.

Courses offered in Part IV, Additional Related Courses

104 *Curriculum Theory and Design* (2 hours). Not offered in 1973–74.

110 *Game Theory and Simulation in Relation to Learning* (2 hours). Not offered in 1973–74.

61. Geology

390 *Geology* (4 hours). Value and objectives of a Geology course in the Ontario secondary school curriculum: investigation and study of appropriate teaching methods; procedures and curriculum organization; use and value of maps, equipment, teaching aids, books and field exercises for secondary school Geology.

1700 *Seminar in Geology* (4 hours). For Type A candidates in Geology. (These candidates are advised to select Geography or Science as the other option in the High School Assistants' Program, Type B.) Teaching and discussion of the Geology curriculum; development and analysis of some of the difficult topics by means of

original research and subsequent reports; experimental treatment of the work; field exercises; use of texts, manuals, maps and teaching aids; measurement and evaluation; organization and timing of a course of study in Geology and Mineralogy; discussion of appropriate teaching methods and procedures.

62. History

405 *History* (4 hours). A series of lectures and seminars on the following with specific reference to classroom practice:
Survey of history curricula in the schools; principles of course organization; procedures in course organization; factors in the development of effective teaching.
The teacher's philosophy and objectives in teaching history.
A study of the various forms of methodology used in history classes; evaluation of resources; new approaches to history teaching.
The student of history; motivation; evaluation; dealing with individual differences.
Preparation of a unit of a course of study in history.

2300 *History* (4 hours). For Type A candidates in History. A series of lectures and seminars with emphasis on the practical application of the following:
A study of the critical philosophy of history, emphasizing the methods of the historian and the problems of historical knowledge; a brief survey of the approaches of selected historians and philosophers to these problems.
Cognitive and affective objectives in teaching history; approaches to the teaching of history such as thematic chronological, problems, enquiry, public issues, concepts and generalizations.
Various forms of methodology.
The planning and organizing of historical materials for presentation by various methods including the treatment of themes, trends and interpretation of material.
Analysis of student difficulties.
Evaluating the effectiveness of teaching and learning.
Preparation of a Teaching Program of a major unit of a course of study.

63. History, Philosophy, and Sociology of Education

History, Philosophy, and Sociology of Education

Courses offered in Part II, Educational Theory

260 *Comparative Education* (2 hours). The basis of this course is student reading, class presentations, and discussion. The particular countries and topics to be dealt with will depend upon student interest and experience. The initial class discussions will deal with concepts common to education whatever the basis (e.g. liberalism, socialism, communism, nationalism, religion, development, or international cooperation). Students will then proceed to examine topics such as the aims, structure, curriculum, role of teachers, alternative routes, and control of education in various countries and relate these to the

social, economic and political systems and their underlying assumptions and ideologies. By comparing the educational patterns of several countries, including Canada, students can gain a deeper insight into education.

261 *Experience and Education* (4 hours). A course designed to explore the relationship between theory and practice by trying to put theory into practice. The course will involve a short initial period of lectures and seminars when various theoretical positions will be presented and discussed. Following this, students will select areas of study which should take them out of the Faculty and into other social institutions. It is anticipated that students will select topics which involve such dilemmas as school-community relationships interdisciplinary approaches to education, Canadian issues in education, student-teacher relationships, morality and the drug culture, and so on. The final weeks of the course will involve a consideration and evaluation of the work undertaken and the method adopted.

262 *Modern Philosophy and Education* (2 hours). A course dealing with such key problems as human freedom, coercion in the classroom, the problem of absurdity, social philosophy and educational theory, approaches to student-centred education, and the influence of modern philosophy on aims and methodology in education. Selected modern philosophical works will be examined. Students are encouraged to consider conflicting viewpoints and develop their own positions.

263 *Progressive Education in Theory and Practice* (2 hours). An analysis and discussion of progressive theories and practices with special reference to the ideas of the Pragmatists and of the Hall-Dennis Report, *Living and Learning*, for the purpose, in the main, of inducing beginning teachers to search constantly for meaning in such familiar learning concepts as interest, activity, discovery, assimilation, authority, freedom, natural growth, creativity, and continuous progress.

264 *School and Society* (2 hours). A course involving a consideration of such problems as socio-cultural influences on educational achievement, value conflicts (between generations and among socio-economic classes), and the conflicting functions of the school as an institution for transmitting the cultural heritage as well as criticizing it. An analysis of these problems will uncover such issues of current concern to schools and teachers as the generation gap, educational control, student power.

265 *Sociology of Education* (2 hours). An examination of the school as an institution in the society which it serves. Topics will include the structure of society and education, education and social change, education and social mobility, the socialization of the child, the social role of the teacher, the influence of economic and political forces on

education, education and the values of the community. Previous university work in sociology is desirable.

266 *Values in Education* (2 hours). An examination of selected topics in value theory seen within the educational context. Examples of possible topics: authority and freedom; perception and judgment in education and the arts; the aims of education; valuational impact of the mass media; the teacher and the new morality; expression, representation, and value formation; technology and counter-culture; conceptual analysis of the educational environment. No formal background in philosophy is required.

267 *Individual Research Project* (2 hours). A student who wishes to engage in an individual research project must obtain approval of the Department before electing this course by: (a) submitting a brief proposal acceptable to the Department, and (b) showing evidence of research skills appropriate to the area of study. The privilege of submitting an individual research project is not open to extramural candidates.

268 *Authority and Freedom in School* (4 hours). Can an ideal of individual freedom be supported? Can authority be justified? Does the ideal of individual freedom preclude the exercise of authority? Should the school enforce a prevailing moral code? Can a school be amoral? Is "compulsory education" a contradiction? Why bother being ethical? This course will attempt to get at the roots of human ethical valuing and thereby illumine, and confront one with, the moral dimension of the school.

269 *Issues in the History of Canadian Education.* A course designed to give students a perspective of the main influences, problems, and changes in Canadian education. Some of the issues that may be examined are: the functions schooling has performed; the educational roles of institutions other than schools; family life and the concepts of childhood and adolescence: the alteration in the roles of the teacher and student; and the influence of social, economic and political factors on education. The particular aspects to be studied will be determined by the students in consultation with the instructor. The course is based on student reading, class participation and discussion. (2 hours)

270 *Cross-Cultural Education* (2 hours). An interdisciplinary examination (from perspectives such as history, psychology, sociology, philosophy, and program development) of the educational issues, problems, and processes encountered in a pluralistic society. The course will focus upon education in relation to poverty, ethnic groups, and counter-culture. Sample issues to be dealt with are: assimilation and integration, the role of religion in education, value conflicts and discipline, mental health, prejudice and discrimination, curriculum design, open-structured and 'free' schools.

271 *Modern Philosophies and Education – Advanced Level* (2 hours). This seminar course will concentrate on Camus, Sartre and Dewey. Students will study two of the three philosophers mentioned, plus one other philosopher of their own choosing. Only students with at least three philosophy courses to their credit or who have the permission of the instructor may enrol. Students taking this course may not register in Course 262 *Modern Philosophy and Education.*

272 *History of Educational Thought in Western Culture* (2 hours). A critical examination of some of the major ideas that have influenced educational thought and practice in Western culture, beginning with Plato and Aristotle. Students will investigate various theories of learning, the concept of the ideal teacher, the history of educational institutions, images of childhood, and modern mass education. Humanist and religious perspectives as continuing themes in educating men and women for their particular era will form the core of the study.

Courses offered in Part IV, Additional Related Courses

134 *Philosophy and Education in the Classical World* (2 hours). Not offered in 1973–74.

135 *Jean-Paul Sartre and Education* (2 hours). Not offered in 1973–74.

136 *Problems in Canadian Education* (2 hours). A reading-discussion course where students will select for individual study a particular problem or theme in the history of Canadian education. For example: technical and vocational education, the kindergarten movement, progressive education, ethnic groups and assimilation, urbanization, rural problems, the role of the state, or the changes that have taken place in the aims and content of certain school subject areas such as health education, physical education, history, literature, the mathematics or the sciences.

64. Home Economics

410 *Home Economics* (8 hours). For Intermediate and Type A candidates. Development, present trends, values and aims of Home Economics in Ontario schools with emphasis on the growth of personal and professional philosophy.
New concepts of curriculum and teaching emphasizing flexibility and recognition of individual differences are explored through an individualized program offering a wide choice of learning experiences.
Creation and function of objectives and evaluation procedures in the learning-teaching process with implications for planning.

2500 *Seminar in Home Economics* (2 hours). For Type A candidates in Home Economics. A study of Home Economics education

as it relates to the Canadian family, the individual and the environment, with emphasis on readings in current literature and discussions. Students will become familiar with resource materials, with the work of outstanding leaders in the field and will develop a strong philosophy for potential leadership.

Course offered in Part IV, Additional Related Courses

144 *Management in Home Economics Curriculum* (2 credit hours). Not offered in 1973–74.

ndustrial Arts

415 *Industrial Arts* (8 hours). A course which gives credit for Part I of the two-part sequence leading to the Elementary Certificate in Industrial Arts. The course consists of two types of experience. The first type includes lectures and laboratory experience in material science, design technology, environmental design, fabrication and production. Problems are presented to develop creative abilities, experimentation, and the required hand and machine skills to work with a variety of materials and processes. Factors controlling the design and planning of objects in the man-made environments are studied and applied in practical work.
The second type includes methods of instruction in Industrial Arts and practice teaching.

Courses offered in Part IV, Additional Related Courses

113 *Introduction to Vocational, Occupational, and Industrial Arts Education* (2 hours). Types of certificates, the admission requirements, history, philosophy, and the means of realizing the aims of these three types of education.

114 *Design Education* (2 credit hours). (See Section 51)

123 *Special Topics in Creativity* (2 hours). In-depth examination of the development of creativity through problem-solving, with opportunities for application. (See Section 102)

130 *Art and Crafts for Elementary Schools* (2 hours). (See Section 40)

139 *English: Rhetoric and Semantics* (2 hours).

RHETORIC
Methods and patterns of clear and effective writing; relationship between thinking and the composition process; perceptive seeing; rhetorical considerations in the composition of sentences, paragraphs, and essays; characteristics and techniques of effective identification, definition, comparison and contrast, classification, and illustration; three types of analysis, functional, process, and causal.

SEMANTICS

Representative subjects of investigation: codes and levels of speech; problems with definitions; relationship between abstraction, thought and action; the uses of language – both verbal and non-verbal – in popular culture, advertising, mass media, news gathering, religion and prayer, science, and education.

66. Institute of Child Study

Course offered in Part IV, Additional Related Courses

001 *Principles and Practices of Child Study* (2 hours). A consideration of general principles of physical, motor, cognitive, emotional, social and personality development and ways of identifying, implementing and evaluating those practices which support this development. Emphasis will be placed on examining methods and procedures used by parents and teachers in the socialization and education of children from infancy through adolescence. Within the framework of these general principles, consideration will be given to specific problem areas such as learning disabilities, speech defects, mental retardation, cultural and emotional deprivation, cultural conflict, delinquency, illness, psychosomatic disorders and emotional problems.

67. Latin and Greek

425 *Latin and Classical Civilization*, 400 *Greek* (5 hours each language). An examination of the linguistic and paralinguistic elements involved in the teaching of Latin and/or Greek, including: oral reading of prose and poetry (all common metres); morphology; grammar and syntax; derivation; use of multi-media and audio-visual aids and interest devices; the direct approach, with stress on the Danish Nature Method, The Cambridge Latin Course, Programmed Learning; individual, small group and large group methods; curriculum development and presentation through the medium of team teaching, with particular emphasis on the sociological aspects of life in ancient Rome and Greece; testing and measurement.

Seminar in Classics, 2900 *Latin*, 2100 *Greek* (2 hours). An examination of techniques involved in curriculum planning and presentation appropriate for use in advanced classes of Latin, with particular emphasis on the suitability for use in secondary schools of the writings of many Roman authors, including Plautus, Caesar, Horace, Virgil, Cicero, Catullus, Tibullus, Propertius, Nepos, Suetonius, Seneca, Tacitus, Pliny, Martial, Juvenal, Petronius, Aulus Gallius, Lucretius, St. Augustine and other medieval selections; advanced grammar and syntax; testing and measurement.

68. Mathematics

430 *Mathematics* (5 hours). A consideration of the place of mathematics in elementary and secondary education; objectives of the mathematics teacher.

Classroom procedures and teaching methods, Grade 1 through Grade 12, of a balanced student-centred teaching program including methods designed to obtain maximum student involvement in the

discovery and development of mathematical concepts and techniques; individual, small group, and large group methods; team teaching involving curriculum planning and execution as a team effort; laboratory techniques; use of multi-media, audio-visual materials, calculators, models and other instructional materials; interdisciplinary approaches, environmental studies; use of the mathematics workshop to promote understanding and confidence, and develop powers of enquiry and creativity; seminar methods; use of socratic discussion; research; testing and evaluation.
The implications for the elementary and secondary schools of contemporary trends in mathematics education; history and development of mathematics; foundations of algebra and geometry; fundamental concepts of logic; applications of mathematics.

3100 *Seminar in Mathematics* (4 hours). For Type A candidates in Mathematics.
A consideration of the development of curriculum for the elementary and secondary school mathematics programs from kindergarten through Grade 13; the responsibilities of departmental administration and professional leadership.

Courses offered in Part IV, Additional Related Courses

155 *Research Project in Mathematics Education* (2 hours). A study in depth of a selected problem in mathematics education involving a combination of seminar, laboratory work and field experience. This study is intended for students who are primarily interested in the teaching of mathematics.

Iniversity of onto Course Mathematics

101 *Mathematics* (2 credit hours). An introduction to higher mathematics including a study of some secondary school topics from an advanced point of view. This course is open to students having at least 12 credits in university mathematics.

NOTE: This course in Mathematics is offered to provide particular background pertinent to the teaching of secondary school mathematics. This course carries 3 credits toward qualification for endorsement of the High School Assistant's Certificate, Type B, and for the Type A Certificate. Mathematics 101 may be taken as an Additional Related Course.

70. Modern ges: French, man, Italian, ian, Spanish

Modern Languages (5 hours per language). French 380, German 395, Italian 420, Russian 460, Spanish 475.

METHODOLOGY:
Current aims; specific objectives at secondary and primary levels; curricula; materials.
Procedures; specific techniques in audiolingual presentation; the written language; vocabulary acquisition; inductive approach to language generalizations; teaching literature.

Lesson planning (initial, series, review).
Tests and examinations, both oral and written; administration; marking.

APPLIED PHONOLOGY:
Description of the sounds; intonation; accent; discrimination and production on the part of the learner; standards of phonemic and phonetic accuracy (where pertinent); remedial drills; error detection by the teacher; counselling techniques and practice.

CONVERSATION:
Free and guided discussions; leadership practice.

LANGUAGE PRACTICE:
Current usage, emphasizing the spoken language; laboratory drills with pedagogical bias; testing program. (Additional laboratory time may be required of those in need of remedial work.)

(a) *Seminar in Modern Languages* (2 hours). For Type A candidates in *French* 1300, *German* 1900, *Italian* 2700, *Russian* 4700, *Spanish* 5300, whether chosen as a single Type A subject or combined with another Type A subject. Study in depth at all levels, as outlined in the Courses of Study and Curricula issued by the Ministry of Education; stress on methods of presenting work at the Grade 13 level.

(b) *Seminar in Modern Languages* (2 additional hours). For Type A candidates in *French* 1300, *German* 1900, *Italian* 2700, *Russian* 4700, *Spanish* 5300, when *not* combined with another Type A subject. Selected topics, such as linguistics, learning theory and teaching practice, curriculum, culture, reference works, resource materials, textual research, preparation of teaching modules.

Courses offered in Part IV, Additional Related Courses

102 *Applied Linguistics* (2 credit hours). Study of different applications of linguistic theories to the teaching of French; special attention to problems of phonemics, morphology, syntax and semantics in connection with the data of structural linguistics. This course is open to any student of French.

103 *Culture and Society in German Language Teaching* (2 hours). Historical, social and regional factors in the teaching of modern German; a laboratory approach. This course is open to any student of German.

108 *Electronic Aids to Language Learning* (2 hours). Audio aids including language laboratory; scripting and taping of programs; film and video production; equipment manipulation. This course (which presupposes an interest in, but no knowledge of, electronic aids) is open to any student of a Modern Language.

121 *French at the Elementary School Level* (2 hours). French as a second language from the earliest grades of the elementary school; programs; procedures specific to the age level; audio-visual aids.

NOTE:
This course may be chosen by: **i** a candidate enrolling in both the Elementary Education Program and French; **ii** a candidate proceeding to any Type A certificate in French.
This course leads to one of the following certificates of the Ministry of Education:

i Certificate as Teacher of French to English-speaking Pupils in Elementary Schools, for candidates enrolled in both the Elementary Education Program and French;
ii Temporary Certificate as Teacher of French to English-speaking Pupils in Elementary Schools, for candidates not enrolled in the Elementary Education Program but proceeding to any Type A Certificate in French.

129 *Culture and Society as they relate to the teaching of French* (2 hours). Historical, social and regional factors. A required part of the course is field work in the native milieu. Open only to students of French.

160 *Individualization in Modern Language Programs* (2 hours). A survey of the principles of individualization, their application to Modern Language programs, and an examination of some of the published literature. An integral part of the course will be the production by candidates of experimental modules related to the language(s) they are studying. This course is open to any student of a Modern Language.

71. Music

435 *Music, Vocal and Instrumental*

Music, Instrumental (6 hours). This is a practical course emphasizing the individual mastery of instruments and methods of class teaching, and may be taken only in conjunction with Vocal Music.
Music, Vocal (5 hours). The musical experience; listening materials; sound exploration; manipulation of sound; symbols of music; musical procedures. Techniques of choral production; conducting; song materials.

3300 *Seminar in Music* (6 hours). For Type A candidates in Music. Comparative studies of current aesthetics and practices; advanced ensemble techniques; original compositions or arrangements for the ensemble; problems in the developing of aural responsiveness to varied musical expressions; examination of sound manipulations and formal procedures; multi-media presentations; studies in curriculum design.

Course offered in Part IV, Additional Related Courses

137 *Chamber Music* (2 hours). This study will include performance as well as listening and analysis. Candidates, preferably wind and string players, will be required to audition before being accepted into the course.

72. Physical and Health Education

440 *Physical and Health Education* (Women)
445 *Physical and Health Education* (Men)
Part I of the Program for the Intermediate Certificate (8 hours):
An introductory course in principles and practices of Physical and Health Education. Emphasis is placed on methods of teaching the physical activities and health materials outlined in the Courses of Study for the Intermediate Division of the Ontario Ministry of Education.
Part II of the Program for the Intermediate Certificate (4 hours):
A continuation of the program of Part I of the Intermediate Certificate.
Program for the Specialist Certificate (8 hours):
Emphasis is placed on methodology; philosophic and scientific principles; organization and administration of all aspects of Physical and Health Education in the school situation.

3700 *Seminar in Physical and Health Education – Women* (8 hours.)
3900 *Seminar in Physical and Health Education – Men* (8 hours).
For Type A candidates in Physical and Health Education.
The Seminar is concerned with: educational concepts relative to Physical and Health Education; scientific principles relative to human movement; organization and administration of all phases of the secondary school Physical and Health Education program; advanced methodology and teaching techniques. These seminars include the work of the H.S.A. Type B course in Physical and Health Education.

Courses offered in Part IV, Additional Related Courses

105 *Current Health Problems in North American Society* (2 hours). A survey course including lectures and seminars related to such health areas as cardiovascular disease, mental health, air and water pollution, consumer health, drugs, and sex education.

115 *Outdoor Education* (2 hours). An introductory course emphasizing the use of the outdoor environment as an educational medium. An interdisciplinary program which includes lectures and seminars and devotes a considerable amount of time to field work.

151 *Affective Learning through Physical Education* (2 hours). Not offered in 1973–74.

73. Political Science

450 *Political Science* (4 hours). A program of lectures and seminars involving group work, presentations and films with specific reference to classroom practice. Political science as a discipline and its place in the secondary schools; the Government of Canada – machinery, process, performance and participation; principles of course construction – group preparation and presentation of representative units selected from Ontario Ministry of Education Guideline: People and Politics; current events in the classroom; examination of a variety of approaches to the teaching of Politics and Government; motivation and evaluation of students and teachers.

4300 *Political Science* (4 hours). A seminar-workshop course for Type A candidates combining the academic study of political science with practical experience in the pedagogy of the subject. Seminar discussions conducted by each member of the course centre around academic topics in the field of political science. Videotaped lessons by each candidate illustrating a variety of approaches provide a basis for critical analysis of effective methodology. One major research paper or project during the year.

. Psychology and Sociology

455 *Psychology and Sociology* (4 hours). A series of seminars dealing with the curriculum of the secondary school course "Man in Society"; various approaches to teaching "Man in Society"; special techniques and curricular innovation as applied to "Man in Society". Preparation of a unit of study.

4500 *Psychology* and 5100 *Sociology* (4 hours). A series of seminars for Type A candidates dealing with the curriculum of the secondary school course "Man in Society"; systems models of the classroom; the application of social science theories to instructional behaviour; innovation and the process of curriculum construction; the role of the social scientist in the school milieu. Preparation of one major paper during the year.

75. School Librarianship

465 *School Librarianship* (10 hours). An introductory course for potential School Librarians. The following aspects of the School Library will be explored: Collection, including curriculum, recreational and basic reference materials; Services; Administration; Organization of Materials. Seminars for discussion of materials and student presentations, laboratory periods for practice, and lectures constitute the format of the course.

Candidates accepted for School Librarianship should consider selecting Educational Media 107, as their Additional Related Course.

This course in School Librarianship is Part I of a two-part program leading to the Intermediate Certificate in School Librarianship. To complete the requirements for the Intermediate Certificate, a summer session subsequent to one year of successful experience in a school library is required.

OR

466 *School Librarianship* (6 hours). For candidates who hold an accredited degree in Library Science. Emphasis will be placed on services given by the School Library, the curriculum development function of the School Library, and special research projects.

Course offered in Part IV, Additional Related Courses

149 *The School Library and the Subject Teacher* (2 hours). The inter-relationship between the subject teacher and the School Library; how the use of resources and services provided by the Library can contribute to more effective learning. This course may not be taken in combination with Courses 465 or 466.

76. Science Education

470 *Science* (4 hours). The role of Science in elementary and secondary education; the aims and objectives of Science education; Science curriculum design; unit planning and lesson planning; a study of representative portions of contemporary Science courses; an examination of the various approaches to the teaching of Science; procedure and methods used to obtain maximum student interest and participation; recognition of individual student differences; the use of audio-visual aids in Science teaching; source materials; the purchase, maintenance and use of equipment; testing and evaluation.

0300 *Biology* (6 hours) – For Type A candidates in Biology.

0500 *Chemistry* (6 hours) – For Type A candidates in Chemistry.

4100 *Physics* (6 hours) – For Type A candidates in Physics.

Courses 0300, 0500, and 4100 consist of a series of lectures, seminars and laboratory workshops which emphasize the methodology and content of the Intermediate and Senior Divisions in the various branches of Science. The content of Science 470 will also be covered with reference to the specialist teacher in each subject area.

Courses offered in Part IV, Additional Related Courses

109 *Environmental Studies* (2 hours). From the areas of freshwater ecology, terrestrial ecology, soil ecology, environmental pollution, and urban studies, material is selected that can be used to supplement existing programs in schools or to build an interdisciplinary course in Environmental Studies. This course has a science base. Field experience is provided.

140 *Science Programs in Elementary Education* (2 hours). A course of particular interest to Type A candidates in Biology, or Chemistry, or Physics. A study of the science programs currently used in elementary schools; teaching techniques and procedures specific to age level; correlation of Science in the senior elementary grades and the junior secondary grades.

Bachelor of Education Degree Programs Conducted by the Division of University Extension

77A. Bachelor of Education Degree Program for Graduates of the One-Year Course prior to 1970

Bachelor of Education Degree Program for graduates of The College of Education who were awarded the High School Assistant's Certificate prior to May, 1970. The Division of Extension, University of Toronto, offers a program in summer and winter sessions which will enable graduates of the one-year program prior to May, 1970, leading to the Interim High School Assistant's Certificate, Type B, to qualify for the Bachelor of Education Degree.

PROGRAM: A candidate must complete two of the courses in the present one-year program leading to the Bachelor of Education Degree, namely:

a one course selected from a list of offerings in *Part II, Educational Theory,*

b one course selected from a list of offerings in *Part IV, Additional Related Courses.*

NOTE:

i The summer day sessions are of six weeks' duration.

ii The course in each subject will be thirty class hours.

iii A candidate may take one or two courses in winter or summer session.

iv It may be necessary to limit enrolment in certain courses.

v A course will not be offered unless sufficient candidates apply.

vi This program will not be offered after July 1, 1974.

Admission Requirements: A candidate must submit to the Office of Admissions, University of Toronto, proof of:

a graduation from *The College of Education* in a One-Year High School Assistants' program, Type B, prior to May, 1970;

b possession of the Permanent High School Assistant's Certificate.

Enquiry and Application: Division of Extension, University of Toronto, 119 St. George Street, Toronto M5S 2E8.

77B. Bachelor of Education Degree Program

Bachelor of Education Degree Program for holders of Ontario permanent basic teaching certificates. The Division of Extension, University of Toronto, offers a program in summer and winter sessions which enables graduates who meet the admission requirements outlined below to qualify for the Bachelor of Education Degree.

PROGRAM: A candidate must complete four of the courses in the present one-year program leading to the Bachelor of Education Degree, namely:

a one course selected from a list of offerings in *Part II, Educational Theory,*

b one course selected from a list of offerings in *Part IV, Additional Related Courses,*

c two additional courses selected from *Part II, Educational Theory* or *Part IV, Additional Related Courses.*

NOTE:

i The summer day sessions are of six weeks' duration.

ii The course in each subject will be thirty class hours.

iii A candidate may take one or two courses in winter or summer session.

iv It may be necessary to limit enrolment in certain courses.

v A course will not be offered unless sufficient candidates apply.

Admission Requirements: A candidate must submit to the Office of Admissions, University of Toronto, proof that he holds:

a an approved university degree from an accredited university (See Section 29);

b a permanent basic Ontario teaching certificate.

Enquiry and Application: Division of Extension, University of Toronto, 119 St. George Street, Toronto M5S 2E8.

One-Year Programs for Certificates in Technical Education and Industrial Arts
(A) Vocational or Occupational Certificates and Bachelor of Education Degree

78. Bachelor of Education Degree and the Interim Vocational Certificate, Type B, or Interim Occupational Certificate, Type B (Practical Subjects)

The degree of Bachelor of Education will be awarded to a student who holds an approved degree from a recognized university, who has the required number of years of wage-earning experience, who meets the other admission requirements peculiar to his subject area and who also successfully completes the one-year program leading to the Interim Vocational Certificate Type B or the Interim Occupational Certificate Type B (Practical Subjects), awarded by the Ontario Ministry of Education. (See also Section 27.)

Other candidates with suitable academic standing and wage-earning experience may enter a One-Year Program leading to an Interim Vocational Certificate, Type B, or an Interim Occupational Certificate, Type B (Practical Subjects), awarded by the Ontario Ministry of Education.

79. Vocational Certificates

Interim Vocational Certificate, Type B. The basic certificate is the Interim Vocational Certificate, Type B. It qualifies the holder for five years as a teacher in the Vocational subject designated on his certificate.

A Permanent Vocational Certificate in the subject named may be requested of the Ministry of Education upon the completion of two years' successful teaching experience in a secondary school in Ontario, in the subject area designated on this certificate.

Interim Vocational Certificate, Type A. The higher certificate is the Interim Vocational Certificate, Type A. It qualifies the holder for five years as a teacher in the Vocational subject designated on his certificate.

A Permanent Vocational Specialist's Certificate may be requested of the Ministry of Education upon completion of two years' successful experience in a secondary school in Ontario in the subject designated on the certificate. The Type A Certificate may qualify the holder to become a Technical Director in a secondary school.

80. Occupational Certificates

Interim Occupational Certificate, Type B (Practical Subjects). The basic certificate is the Interim Occupational Certificate, Type B (Practical Subjects). It qualifies the holder for five years as a teacher in Occupational subjects.

A Permanent Occupational Certificate (Practical Subjects) may be requested of the Ministry of Education upon completion of two years' successful experience in a secondary school in Ontario teaching occupational subjects. (Practical Subjects)

Interim Occupational Certificate, Type A. The higher certificate is the Interim Occupational Certificate, Type A. It qualifies the holder for five years as a teacher in Occupational subjects.

A Permanent Occupational Specialist's Certificate may be requested of the Ministry of Education upon the completion of two years' successful experience in Ontario. The Type A Certificate may qualify the holder to become a Director of an Occupational Department.

81. General Conditions of Admission

An applicant for admission to the One-Year Program leading to certificates in Vocational, Occupational, or Industrial Arts must make application, not later than August 17, to the Director of the Department of Technical and Industrial Arts, 371 Bloor Street West, Toronto, Ontario, M5S 2R7 on a form to be obtained from him, and shall submit with the application:

1 *A birth certificate.* If not born in Canada, the candidate must submit a certificate from a competent authority that he is a Canadian citizen or has Landed Immigrant status or has applied for Canadian citizenship. For the Interim Vocational Program, male applicants shall be at least 23 years of age; female applicants shall be at least 21 years of age. This is in accordance with a Ministry of Education requirement. See the Department of Education Act, 1954, Section 11, (1) (c).

2 Evidence of a negative tuberculin test reading or chest x-ray taken within the year preceding September 10, 1973.

Requirements Admission to ogram for the im Vocational Certificate, Type B or Interim Occupational Certificate, Type B

To this program may be admitted a candidate who holds an approved degree in engineering, architecture, nursing or science from a recognized university, graduates of Polytechnical Institutes or Colleges of Applied Arts and Technology, and skilled tradesmen.

Engineers

An applicant shall be the holder of a four-year degree from the Faculty of Applied Science of a recognized university, and shall submit statements to prove not less than two years' subsequent experience in the field of his major subject.

Technologists and Technicians

An applicant shall hold a three-year diploma from an approved program offered by a Polytechnical Institute or College of Applied Arts and Technology, which requires Ontario Grade 12 standing as one of the conditions for admission. He must also document three years of acceptable work experience.

Skilled Tradesmen

An applicant is required to give evidence of a minimum of a Second-

ary School Graduation Diploma, or equivalent, and approved trade training and experience, generally seven years.

The training or apprenticeship required shall be that demanded for journeyman's qualifications in the trade concerned. Special training obtained in an approved day vocational school will be taken into account in considering the period of training. An applicant shall submit statements from the persons or firms under whom he was trained, showing the length of the training period and the nature of the work.

The experience required shall be several years of wage-earning journeyman trade experience with reputable firms, and shall be such as to show that the applicant is a skilled craftsman, competent in the main branches of the trade concerned, and familiar with its recent development. The length of the journeyman experience depends upon the nature of the trade. Documentary evidence of experience in the trade in approved shops shall be furnished by the applicant.

An applicant for the Interim Occupational Certificate, Type B (Practical Subjects), shall furnish proof of wage-earning experience over at least seven years and involving at least three trade areas.

In calculating the total years of wage-earning experience and/or training, only those years subsequent to the date of the highest academic attainment used in the calculation can be credited unless the academic program of the candidate was interrupted for a number of years during which he was engaged in such wage-earning activity.

NOTE:

1 In all cases the name of the degree, diploma, or apprenticeship must correspond with both the nature of the wage-earning experience and the subject to be taught.

2 A minimum of two years of Canadian wage-earning experience is required.

3 Beginning September 1, 1971, successful completion of the practical portion of the Technical Proficiency Examination has been required. This is a performance test.

83. March Intake Program

Beginning in 1973–74, the Technical and Industrial Arts Department will offer on a trial basis a 17-month program of teacher education leading to the Interim Vocational Certificate, Type B, or the Interim Occupational Certificate, Type B (Practical Subjects).

Admission Requirements:

An applicant must:

1 meet the admission requirements of the Technical and Industrial Arts Department, and

2a be teaching on a Letter of Permission in a manner satisfactory to the Director or Superintendent of Education concerned, or

2b have the assurance of an appropriate teaching position from a board of education, commencing in September of the following year, and

2c secure the approval of the Technical and Industrial Arts Department.

Program:
The program consists of three components:
1 a session extending from March 26 to August 17, 1973, composed of 15 in-Faculty weeks and 5 weeks of Practice Teaching, followed by
2 a one-year experience of formal supervised internship in an Ontario school during which he may complete credit for six weeks of Practice Teaching,
3 a six-week session extending from July 2 to August 9, 1974.
Candidates who successfully complete this program will be recommended for the Interim Vocational Certificate, Type B, or the Interim Occupational Certificate, Type B (Practical Subjects).

equirements dmission to Program for the Interim Vocational ertificate in e Economics

To this program may be admitted graduates with satisfactory standing in a three-year Secondary School Home Economics teaching option of a polytechnical institute or equivalent. Wage-earning experience is not a prerequisite for admission to this program. Because of the nature of this program, enrolment may be limited.

NOTES:
1 Home Economics is offered in the One-Year Program only.
2 Applicants should pay particular attention to the fact that no Vocational Type A Certificate is offered in Home Economics. All candidates must obtain an acceptable degree before they are eligible to proceed to higher certification through the High School Assistants' Program.
3 This program will be discontinued as of May 10, 1974.

equirements dmission to the Program the Interim Vocational Occupational Certificate, Type A

This program is offered to graduates of a Faculty of Applied Science or a Faculty of Architecture or graduates holding the B.SC.N. from a recognized university, with at least 70% or B, whichever is higher, in the final and one other year.

Each candidate shall:
1 submit evidence of not less than two years of approved wage-earning experience in the field of his major subject;
2 be required to take the courses of the Program for the Type B Certificate, and to obtain a grading of 70% or B, whichever is higher;
3 take additional courses in the organization, administration, and supervision of vocational schools, educational measurements, curriculum development, comparative education, and philosophy of education.

86. Program for the Interim Vocational or Occupational Certificate, Type B

The program consists of five parts:

Part I Teaching Subjects
Part II Educational Theory
Part III Professional Practice
Part IV Additional Related Courses
Part V Technical Proficiency Examination

Part I Teaching Subjects

Teaching Subjects

All candidates will take the following courses:

Methods of Teaching the Technical and Industrial Arts 702

Principles and Practices of Technical and Occupational Education 703 (for Vocational/Occupational students only)

Principles and Practices of Industrial Arts Education 704 (for Industrial Arts students only)

Part II Educational Theory

Educational Theory

All candidates will take the following courses:

Structural and Legal Bases of the Ontario School System 201

Curriculum Development for Technical-Occupational Subjects 701

Educational Psychology as it applies to Technical Education 706

History and Philosophy of Technical Education 708

Part III Professional Practice

Professional Practice 705

Observation and Practice Teaching is a ten-week program. The program is conducted in Ontario secondary schools. Assignment of students to practice schools is made outside as well as within the area of Metropolitan Toronto.

Candidates entering the course must be able and willing to accept practice teaching assignments to those schools selected by the Director and Associate Director of Practice Teaching. Candidates absent from regular practice teaching weeks will be required to make up the assignment at the end of the term.

Part IV Additional Related Courses

Additional Related Courses

a All candidates will take the following courses:

English – For Technical and Occupational candidates 707

Technical Workshop 713

b In addition, a candidate must elect one course from the following:

Introduction to Special Education 711

Mathematics 712

Part V Technical Proficiency Examination

Technical Proficiency Examination

Theory 720

Every applicant shall be required to pass a written examination designed to test his attainments as a skilled worker in the subject concerned. The examination shall be on the fundamental principles, operations, processes, and skills of the subject.

7. Program of Studies
Year Session
Leading to the Bachelor of
cation Degree

Program of Studies, One-Year Session leading to the Bachelor of Education Degree

To this program may be admitted a candidate who holds an approved degree in engineering, architecture, nursing, arts or science from a recognized university. Successful candidates with Canadian citizenship or Landed Immigrant status will be recommended to the Ontario Ministry of Education for the Interim Vocational Certificate, Type B, or the Interim Occupational Certificate, Type B (Practical Subjects).

The program consists of five parts:

Part I
hing Subjects

Teaching Subjects

As in Part I, Section 86.

Part II
ational Theory

Educational Theory

a All candidates will take the following courses:
Structural and Legal Bases of the Ontario School System 201
Curriculum Development in Technical and Occupational Subjects 701

b In addition, a candidate must elect two courses from those offered by two departments as shown in Part II (b), Section 32.

Part III
Professional Practice

Professional Practice

As in Part III, Section 86.

Part IV
tional Related Courses

Additional Related Courses

These courses offer a candidate the opportunity to concentrate further on one of his teaching subjects by taking a related course, or to pursue an interest in another teaching subject or in the field of general education.

A candidate must elect one course from Part IV, Section 32.

Part V
Technical Proficiency Examination

Technical Proficiency Examination

As in Part V, Section 86.

Details of Courses in the Program for the Interim Vocational or Occupational Certificate, Type B

NOTE: In each case, the numeral in brackets indicates the number of lecture hours per week.

88. Administration and Program Development

201 *The Structural and Legal Bases of the Ontario School System* (1 hour). The organization of provincial and local systems of education; powers and duties of the various educational authorities; the Education Acts and Regulations of the Province of Ontario. A study of H.S.I. Course content will be covered through lecture, discussion and directed readings.

89. Educational Psychology

706 *Educational Psychology as it applies to Technical Education* (3 hours). An introductory course designed for teachers of the Technical and Industrial Arts. As such, special reference is given to the application of educational psychology to teaching and learning as applied to practical subjects.

Areas explored include development and adjustment, motivation, intelligence and its measurement, and the learning process with stress on motor learning. Theoretical approaches are examined in terms of their practical applications.

90. History and Philosophy of Technical Education

708 *History and Philosophy of Technical Education* (2 hours). Designed to acquaint the student with the historical development of education and the philosophical concepts which underly it. The topics are set forth to show the vocation aspects of educational developments from the Ancient World to the present and to reflect the theories and practices of education as advocated by such thinkers as Plato, Comenius, Rousseau, Locke, Pestalozzi, Fellenberg, Della Vos, Seath, Dewey and Whitehead.

Stress will be placed on the influence of these philosophers on current vocational practice so that a proper perspective may be gained as we examine the various facets of general educational practice.

91. Teaching Subjects

Teaching Subjects

702 *Methods of Teaching the Technical and Industrial Arts* (4 hours).

An introduction to the methodology of teaching skills, concepts, and habits within technical and industrial arts facilities. The course is

highly practical in nature with the overall purpose of fostering creativity, inductive and deductive reasoning, and problem solving. The writing of behavioural objectives, lesson planning, analysis of formal lesson types, and ways of maximizing the effectiveness of individual and small group instruction will be applied in a practice teaching workshop and in micro teaching. Instruction and practice will be given in the preparation of instructional materials, and in methods of testing and evaluating performance.

703 *Principles and Practices of Technical Education* (4 hours). An introduction to the basic philosophy of technical education, relating the concepts and generalizations of technical education to its role in general education; an examination of entering behaviours and learning needs of students; a discussion of the facets of the teaching process emphasizing the most effective and effcient methods. The course will be based on discussions, seminars and lectures.

. Curriculum Development or Technical-Occupational Education

701 *Curriculum Development for Technical-Occupational Education* (2 hours). A course consisting of four separate assignments: Subject Analysis; Course of Study; a Model Shop Plan; Equipment List and Budget.

Subject analysis involving organization of the candidate's teaching subject into blocks and later into practical and theoretical lessons; unit, modular, and cluster courses of study designed to satisfy the needs of today's high school student; emphasis on design and planning of teaching areas; methods of ordering and purchasing supplies and major equipment; drawing up an expendable supply budget and the preparation of sample orders for some major equipment.

3. Vocational Home Economics

Candidates will be required to take Educational Psychology, English (Rhetoric and Semantics), History and Philosophy of Technical Education, Methods of Teaching the Technical and Industrial Arts, Structural and Legal Bases of the Ontario School System. For details, see Details of Courses for the Interim Vocational Certificate, Type B. (Sections 88–91, 94)

710 *Methods of Teaching Home Economics* (9 hours). Philosophy and Techniques of Teaching: development, present trends, values and aims of Home Economics in Ontario schools with emphasis on the growth of personal and professional philosophy. New concepts of curriculum development and teaching, emphasizing greater flexibility and recognition of objectives and evaluation procedures in the teaching-learning process with implications for planning.

04. Additional ated Courses

707 *English for Technical and Occupational Candidates* (3 hours)
Rhetoric and Semantics (2 hours)

RHETORIC:
Methods and patterns of clear and effective writing; and relationship

between thinking and the composition process; perceptive seeing; rhetorical considerations in the composition of sentences, paragraphs, and essays; characteristics and techniques of effective identification, definition, comparison and contrast, classification, and illustration; three types of analysis: functional, process, and causal.

SEMANTICS:
Representative subjects of investigation: codes and levels of speech; problems with definitions; relationship between abstraction, thought and action; the uses of language – both verbal and non-verbal – in popular culture, advertising, mass media, news gathering, religion and prayer, science, and education.

ORAL ENGLISH: (1 hour)
Fundamentals of voice control; oral reading; structure of speech; preparation of presentation of formal speeches; presentation of impromptu speeches.
Before beginning this course, some preparation may be advisable for candidates who lack command of basic English structure.

711 *Introduction to Special Education* (2 hours). A preparation for teaching 'non academic' students. It includes Philosophy, Methodology and Management of the various types of programs in the public school system, as well as some Psychology and Mental Health relating to slower learners.

712 *Mathematics* (2 hours). A course designed to acquaint the students with mathematics as taught at the secondary level including a *core* of topics involving operations with fractions and decimals, the solution of linear equalities and inequalities, formulae, ratio and proportion, powers and roots; *elective* topics chosen from trigonometry, problem solving, the slide rule, estimation and scientific notation, mathematical structure, relations and graphs, calculus.

713 *Technical Workshop* (3 hours). An opportunity for technical and occupational student teachers to broaden and upgrade their knowledge and skills in the teaching subject area in which they will be certified or in a related teaching subject area.

(B) Industrial Arts Programs

95. Industrial Certificates

Candidates with suitable academic standing, a basic Ontario teaching certificate, or equivalent, may enter a One-Year Program leading to an Industrial Arts Certificate.

Interim Intermediate Industrial Arts Certificate
The Interim Intermediate Industrial Arts Certificate qualifies the holder for five years as a full-time teacher of Industrial Arts in all divisions of elementary and secondary schools.
A Permanent Intermediate Certificate may be requested of the Ministry of Education upon completion of two years' successful experience in an elementary or secondary school in Ontario.

Interim Specialist Industrial Arts Certificate
The Interim Specialist Industrial Arts Certificate provides advanced study and certification. It is valid for five years. The holder may ask the Ministry of Education for a Permanent Specialist Industrial Arts Certificate upon the completion of two years' successful experience in Ontario in Industrial Arts teaching.

96. General Conditions of Admission

An applicant for admission to the One-Year Program for Certificates in Industrial Arts must make application, not later than August 15, to the Director of the Department of Technical and Industrial Arts, 371 Bloor Street West, Toronto M5S 2R7, on a form to be obtained from him, and shall submit with the application:

1 *A birth certificate.* If not born in Canada, the candidate must submit a certificate from a competent authority that he is a Canadian citizen or has Landed Immigrant status or has applied for Canadian citizenship.
2 Evidence of a negative tuberculin test reading or chest x-ray taken within the year preceding September 10, 1973.

Conditions of Admission, the Interim Intermediate Certificate

Candidates with suitable academic standing and an Ontario Elementary, High School Assistant's or Vocational Teaching Certificate, or equivalent, may enter a One-Year Program leading to an Industrial Arts Certificate.

NOTE:
Every teacher of Industrial Arts in an elementary school must hold an Elementary School Teacher's Certificate in addition to his Industrial Arts Certificate.
If a sufficient number of applicants apply a special half-year course beginning in January will be offered to those candidates who have:
1 successfully completed Parts I and II of the Elementary Industrial Arts Summer Program and Part I of the Industrial Arts Supervisor's Summer Program, or
2 successfully completed Parts I (seven-week course) and II (seven-week course) of the Elementary Industrial Arts Summer Program with a minimum of a B standing in Part II.
In all cases, candidates who do not have the required B standing are required to complete the full year program leading to the Intermediate Industrial Arts Certificate.

98. Conditions of Admission, the nterim Specialist Certificate

An applicant shall:
1 hold an Ontario Intermediate Certificate in Industrial Arts; and
2 subsequently, have at least one year of successful teaching in the field of Industrial Arts, as verified by the Director of Education in the area concerned; and
3 show evidence of having obtained not fewer than seven Grade 13 credits or approved equivalents, including two in English or Français. It is recommended that the candidate include papers in Mathematics and Science.

99. The Interim Intermediate Certificate

The program consists of four parts:
Part I Teaching Subjects
Part II Educational Theory
Part III Professional Practice
Part IV Additional Related Courses

Part I eaching Subjects

Teaching Subjects
A candidate must elect the following teaching subjects:
Material Science 632
Design Technology 640
Design Environment 645
Fabrication and Production 650

Part II Educational Theory

Educational Theory
A candidate must elect the following subjects:
Curriculum Development 630
Philosophy 634

Part III Professional Practice

Professional Practice 636
Since each candidate enters the program with a teaching certificate, he is given only three weeks in a practice school. His teaching progresses from individual and group instruction to complete charge of

routine duties and class instruction. If possible, the candidate is sent to an Industrial Arts room in an elementary school, a junior high school, and a collegiate institute.

Part IV Additional ıted Courses

Additional Related Courses
Candidates at the present time are not required to take subjects from this part.

. Program for the Interim Specialist Certificate

Industrial Arts, Specialist
The program consists of four parts:
Part I Teaching Subjects
Part II Educational Theory
Part III Professional Practice
Part IV Additional Related Courses

Part I Teaching Subjects

Teaching Subjects
A candidate must elect three of the following teaching subjects:
Architectural Drawing and Building Construction 660
Communications 661
Electricity Technology 662
Electronics Technology 663
Fabrication and Production (Junior Grades) 664
Foundation Design 665
Mechanics 666
Metal Fabrication and Production 667
Modern Materials 668
Plastics Fabrication and Production 669
Recreational Activities – Crafts 670
Recreational Activities – Outdoor 671
Science Technology 672
Wood Fabrication and Production 673

Part II Educational Theory

Educational Theory
A candidate must elect two courses from this part. He may choose from those listed below and suitable course(s) from Section 32, Part II, Educational Theory.

Special Topics in Creativity 123
Experience and Education 261
Comparative Education 680
Creativity and Problem Solving 681
Curriculum Development 682
Introduction to Research Techniques 684 (replacing "Research Techniques 684")
Individual Research Project 686
Research Techniques 687
Comparative Education 750

Part III Professional Practice

Professional Practice 636

Each candidate is given at least three weeks of practice teaching. The program is designed to satisfy the needs and interests of the individual candidate. Experimentation and the use of new methods is encouraged. The candidate is allowed to select the grade level for his practice teaching and, with the cooperation of the associate teacher, is given the opportunity to modify and evaluate the curriculum. A written assignment is also required.

Part IV Additional Related Courses

Additional Related Courses

Candidates at the present time are not required to take courses from this part.

Details of Courses in the Programs for the Interim Intermediate Industrial Arts Certificate and the Interim Specialist Industrial Arts Certificate

Intermediate

630 *Curriculum Development* (1 hour). A study of the problems involved in developing the program and environment for teaching Industrial Arts. Lecture and assignment.

640 *Design Technology* (6 hours). Electricity and Electronics: concepts, applications, power mechanics, and central control of electricity; methodology and teaching techniques. Lecture and laboratory. Mechanics: simple machines and applications; fluid power; basic physics as applied to mechanics; methodology and teaching techniques. Lecture and laboratory.

645 *Design Environment* (6 hours). Introduction to basic elements and principles of visual aspects of the environment, and the process of designing, recording and communicating ideas in two and three dimensions; methodology and teaching techniques. Lecture and laboratory.

650 *Fabrication and Production* (12 hours). The development of basic skills in the use of hand tools and machines, and in the handling of materials. Areas of study include the processing of natural and synthetic materials. Problem solving techniques are learned as the acquired skills are applied. Methodology and teaching techniques. Lecture and laboratory.

632 *Material Science* (2 hours). The study of the structure and properties of materials related to sources; production and use. Methodology and teaching techniques. Lecture and laboratory.

634 *Philosophy* (2 hours). Current educational thought: contemporary aims, problems, and practices in education, with particular reference to Industrial Arts education. The general purpose of the course will be to present a philosophical insight to help students appreciate modern educational issues. Lecture and seminar.

704 *Principles and Practices of Industrial Arts Education* (4 hours). Basic philosophy of Industrial Arts; effective and appropriate teaching methods, stressing problems peculiar to Industrial Arts areas; safety; techniques in the use of tools and machinery; integration with the total school program.

102. Specialist

660 *Architectural Drawing and Building Construction* (4 hours). An experimental approach to structures; a survey of current codes and practices of the construction industry; a study of the materials of construction, their properties and use in modern construction with special attention to their effect upon architectural design; a group construction problem. Methodology and teaching techniques. Lecture and laboratory.

661 *Communications* (4 hours). Techniques of visual communication applied to the design process and teaching methods including technical drawing, sketching, photography and video. Methodology and teaching techniques. Lecture and assignment.

662 *Electricity Technology* (4 hours). Theory and test of devices such as motors, relays and solenoid valves. Such devices to be used with various sensors for heat, light, sound, pressure and strain. A study of automotive systems. Methodology and teaching techniques. Lecture and laboratory.

663 *Electronics Technology* (4 hours). Semi-conductor theory with experiments and application; the use of experimental kits which provide suitable classroom problems. Methodology and teaching techniques. Lecture and laboratory.

664 *Fabrication and Production – Junior Grades* (4 hours). Industrial Arts activities for younger children.

665 *Foundation Design* (4 hours). Concerned with the education of vision through the design process by exploring basic design concepts within the limitations of tools, materials and techniques. Methodology and teaching techniques. Lecture and laboratory.

666 *Mechanics* (4 hours). Study and application of power sources and mechanical devices. Methodology and teaching techniques. Lecture and laboratory.

667 *Metal Fabrication and Production* (4 hours). Advanced study of metals as materials of construction; metal structures; methods of forming, assembly and treatment; tooling for production; design approaches, and application of theory and principles to a variety of metal fabrication fields. Methodology and teaching techniques. Lecture and laboratory.

668 *Modern Materials* (4 hours). Study of new materials and processes and their application in the Industrial Arts classroom. Lecture and laboratory.

669 *Plastics Fabrication and Production* (4 hours). Study of material and means of production in greater depth applied to design fabrication problems. Methodology and teaching techniques. Lecture and laboratory.

670 *Recreational Activities – Crafts* (4 hours). Study of craft materials and processes applicable to Industrial Arts teaching. Lecture and laboratory.

671 *Recreational Activities – Outdoors* (4 hours). Design, construction, and use of equipment related to outdoor recreation. Lecture and laboratory.

672 *Science Technology* (4 hours). Scientific principles applied in inventive construction cutting across activity boundaries. Methodology and teaching techniques. Lecture and laboratory.

673 *Wood Fabrication and Production* (4 hours). Advanced problems dealing with forming, fabrication and processing of wood and allied materials; machine methods with an orientation toward design for production on a limited production basis. Methodology and teaching techniques. Lecture and laboratory.

123 *Special Topics in Creativity* (2 hours). In-depth examination of the development of creativity through problem-solving, with opportunities for application.

261 *Experience and Education* (4 hours). (See Section 63)

680 *Comparative Education* (4 hours). An introduction to educational activities in other Canadian provinces and other countries; a comparison of various educational systems. Lecture and assignment.

681 *Creativity and Problem Solving* (4 hours). Psychology of problem solving; psychology of perception; stages in logical problem solving; system approach; problem solving as an educational strategy; creative technology. Lecture and seminar.

682 *Curriculum Development* (4 hours). The interaction of society and education; current curricular trends in Ontario education; dynamics of curriculum development. Lecture and assignment.

684 *Introduction to Research Techniques* (2 hours). Introduction to research techniques: purpose and rationale, sources of human knowledge, research and problem solving, e.g. definition of problem, related investigations, hypothesis, design of study, collection and evaluation of data, analysis of data, conclusion, report.

686 *Individual Research Project* (4 hours). A student who wishes to engage in an individual research project must obtain the approval of the Department before electing this course. He must have completed course 684 or show evidence of research skills appropriate to the area of study, and submit a brief proposal acceptable to the Department.

687 *Research Techniques* (2 hours). Discussion based on assignments completed in course 684. Research techniques; statistical analysis; techniques of reporting; formulation of conclusions. (Prerequisite: 684 or equivalent)

750 *Comparative Education* (2 hours). (See Section 130)

Recommendation of Vocational, Occupational and Industrial Arts Certificates

103. Final Standing

The final standing of students in attendance in the program for the Vocational Certificate, Type B, Occupational Certificate, Type B (Practical Subjects), or programs for the Intermediate and Specialist Certificates in Industrial Arts, shall be determined by the sessional records of the respective programs. (See Sections 86, 99, 100). The sessional records in each program represent oral and written exercises, practical work, research reports, frequent tests, and the results of term and final examinations.

The standing of candidates will be determined by the combined results of term work and of the final examinations in the subjects of Parts I, II and IV, by the examination results of Part V, and by the record of Observation and Practice Teaching in Part III.

Standing in the subjects of Parts I, II and IV will be issued as follows: A 80–100, B 70–79, C 60–69, D 50–59, F below 50.

A student who obtains 50 per cent of the marks in each of the courses in Parts I, II and IV and 50 per cent of the marks assigned for Part III and for Part V, if applicable, may be recommended by the Council of the Faculty for the Interim Vocational Certificate Type B, or the Interim Occupational Certificate, Type B (Practical Subjects) or the Interim Intermediate or Specialist Industrial Arts Certificates. Candidates who complete the program under Section 87 may be recommended also for the Bachelor of Education degree by the Council of the Faculty.

A student who passes in Part III and fails in not more than two of the courses included in Parts I, II and IV, may be exempted from further attendance, but will be required to take supplemental examinations in the courses failed.

A candidate who fails in a one-year program listed in the Faculty of Education calendar may apply for re-admission in a subsequent year on petition to the Council of the Faculty.

A candidate who withdraws from attendance in any program listed in the Faculty of Education calendar may apply for re-admission in a subsequent year on petition to the Council of the Faculty.

104. Performance Test

A candidate for the Intermediate Industrial Arts Certificate or the Specialist Industrial Arts Certificate must pass a performance test before being recommended for a certificate.

105. Technical Proficiency Examinations ocational and Occupational

A candidate for the Interim Vocational or Occupational Certificate, Type B, must obtain at least 50% (grade D) in each of the practical and theory portions of the appropriate Technical Proficiency Examinations.

Supplemental Examinations, Appeals, and demic Rights of Students

A candidate for the Vocational or Occupational Certificate Type B (Practical Subjects) or the Intermediate or Specialist Certificate in Industrial Arts who passes in Part III (Observation and Practice Teaching) and fails in not more than two subjects of Part I and Part II shall be exempted from further attendance. He may complete his standing for a certificate by re-writing, at an annual examination, the examination(s) in the subject(s) in which he failed. Supplemental examinations will be held in August.

It is the responsibility of the student concerned to apply, not later than July 1, for permission to write the supplemental examinations in which standing is desired.

The statements about academic records (Section 25), academic rights of students (Section 26), and conditions for final standing (Section 33) also apply to all candidates for Vocational, Occupational, and Industrial Arts Certificates.

107. Failure in ore Than Two Subjects

Candidates who fail in more than two subjects of Part I or Part II or in either division of Part III (Observation and Practice Teaching) shall be required to attend and successfully complete another session as follows:

1 Candidates for Vocational, Occupational (Practical Subjects) or Industrial Arts Certificates shall attend the January–May session of the One-Year Program;

2 Candidates for the Vocational, or Occupational (Practical Subjects) Certificates, Type A or Specialist Industrial Arts who fail in two or more subjects will be required to repeat the session concerned.

108. Failure in the Technical Proficiency Examinations

A candidate who obtains a standing below 50% in either the theory or practical examination will attempt a supplemental examination in June, 1974. Candidates who fail to obtain 50% in the supplemental examination will be excluded from further professional training.

A candidate who attends the regular One-Year Program will attempt the theory examination in Technical Proficiency in February, 1974.

. Submission Assignments

Final marks in any subject or for any Vocational, Occupational or Industrial Arts Certificate may not be issued until all assignments have been completed satisfactorily.

NOTE: As the value of *an endowed scholarship or prize* is dependent on the actual income of the fund, it is possible that the value of certain scholarships and prizes at the time of payment may be less than the amount stated in the calendar.

110. Ontario Student Awards Program/Canada Student Loans Plan

Ontario Student Awards Program/Canada Student Loans. The Canada Student Loans Plan was originally instituted by the Federal Government in 1964. The loan scheme was later integrated with provincial grants under the Ontario Student Awards Program. A student may apply for assistance under this Program to meet assessed educational costs when his own resources and/or those of his family are assessed as insufficient to enable him to pursue post-secondary education. The institution to which application is made will inform the student of the amount of aid granted in each case. Under the present program, if residency and other requirements are met, the first $800 of any award is Canada Student Loan and the balance is provided as Provincial grant. Borrowers under this Plan are required to repay the loan portion, but no principal or interest payments are required so long as the student is in full-time attendance at an eligible institution and for six months thereafter. For those qualifying for Canada Student Loan only, the maximum loan which may be advanced under this Plan to one student is $1,400 in one academic year. For those receiving a combination of loan and grant the award maximum is determined by actual educational costs. Application should be made in the first instance to the Registrar, Faculty of Education. If the student qualifies for assistance, he will first receive a Certificate of Eligibility for the loan portion, authorizing him to make arrangements for the loan with any chartered bank or other approved lending institution. The grant portion of the award, if any, is normally paid in the second term, but if the total award is over $1,800, a portion of the grant money will be paid in the first semester.

111. The William Pakenham Fellowship in Education

The late Dr. William Pakenham bequeathed to the University of Toronto the residue of his estate to be used as the governing body of the University may direct on behalf of the activities of the Faculty of Education.

Accordingly, a Fellowship in Education has been established for

advanced work either in the University of Toronto or in some other university approved by the Governing Council. The Fellowship shall be awarded at such intervals and have such value (usually $2,000) as the Governing Council on the recommendation of the Council of the Faculty of Education may from time to time determine.

Applicants must be residents of Ontario, holding a Bachelor's degree and a teacher's certificate valid in a Canadian province, and must submit a record of professional experience and evidence of ability to make a contribution to education in Canada as a result of further work.

An application form may be obtained from the Registrar, Faculty of Education. Completed applications must be received by March 15.

The Pakenham Memorial Prize

As a memorial to Dr. William Pakenham, Dean of The College of Education from 1907 to 1934, the teachers of Ontario have founded an annual Memorial Prize of the value of the interest on $1,000. The Prize will be in the form of books stamped with the Coat of Arms of the University of Toronto, and will be awarded to the student who obtains the highest standing, as reported in the annual returns of the Faculty, in the subjects of Part I of the High School Assistants' Program, Type B, and in Practice Teaching.

The Hugh W. Bryan Memorial Prize of The Ontario Secondary School Teachers' Federation

The Ontario Secondary School Teachers' Federation has founded an annual scholarship of the value of $100 in memory of a former President of the Federation, Dr. Hugh W. Bryan. The prize will be awarded by the Scholarship Committee of the Federation at the close of each session, and after receipt of a report from the Council of the Faculty of Education, to the student in regular attendance throughout the session in the High School Assistants' Program who has shown 'the most outstanding qualities of scholarship, teaching ability, and character.'

The Polymer Corporation Scholarship in Science and/or Mathematics

The Polymer Corporation Limited of Sarnia, Ontario, has established a scholarship of $750 to increase the supply of teachers qualified to teach Science or Mathematics in secondary schools. The applicant must be a resident of the Province of Ontario who has graduated in the past five years with a degree in Arts or Science from a Canadian university. The applicant must have Canadian citizenship or have declared intent to obtain this.

Candidates must be prepared to teach Mathematics and/or Science in a secondary school in Canada upon completion of the 1973–74 regular session of the Faculty of Education, University of Toronto. Application forms are available from the Registrar, Faculty of Education, 371 Bloor Street West, Toronto M5S 2R7, or from the Secretary, Scholarship Committee, Polymer Corporation Limited, Sarnia, Ontario. Completed applications must be received not later than May 15, by the Secretary, Scholarship Committee, Polymer Corporation Limited.

115. International Business Machines Canada Limited Scholarship

International Business Machines (IBM) Canada Limited has established a scholarship in the total amount of $200 to be awarded annually to one or more students registered at the Faculty of Education on the basis of participation and achievement in the Computer Studies Course. Application not required.

116. The Morgan Parmenter Memorial Award in Counsellor Education

Established by Mrs. M. D. Parmenter and Mr. G. T. Parmenter as a memorial to Morgan D. Parmenter, Professor of Guidance, who founded the Guidance Centre in 1942 and was its Director until his death in 1968. This award is intended to recognize annually a student enrolled in the Counsellor Education Course in the one-year Bachelor of Education degree program and is based on scholarship, teaching ability and potential contribution to the development of guidance and counselling. The recipient of the award (value $400.) must satisfy the Dean and the Chairman that the funds will be devoted to furthering his or her education in this field by travel, study, or research.

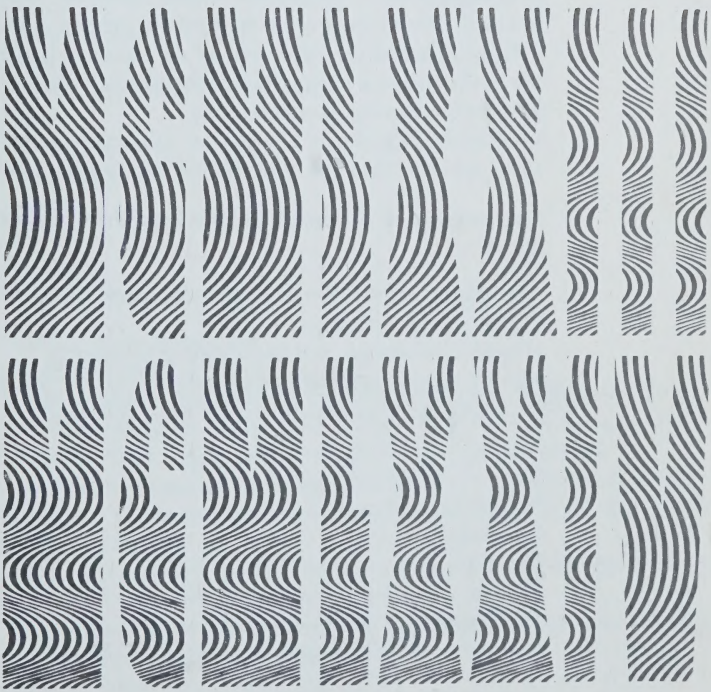
117. Bursaries for Second Language Teachers

Following the recommendation of the Royal Commission on Bilingualism and Biculturalism, the Federal Government is offering bursaries for second language teachers. This program is being administered by the Provincial Government. Further information may be obtained from the Fellowship Section, Student Awards Branch, Ministry of Colleges and Universities, Mowat Block, 8th Floor, Queen's Park, Toronto. Telephone 965-3208.

University of Toronto Degree Programs of Interest to Teachers

118. Graduate Degrees, Ontario Institute for Studies in Education

Programs of Study leading to University of Toronto graduate degrees of Master of Education, Master of Arts, Master of Philosophy, Doctor of Education and Doctor of Philosophy are available through the Ontario Institute for Studies in Education. Enquiries should be addressed to the Director of Graduate Studies, Ontario Institute for Studies in Education, 252 Bloor Street West, Toronto M5S 1V6.



119. High School Assistants' Type B Summer Program for Teachers with Professional Education

A summer program leading to the High School Assistant's Certificate, Type B, will be held from July 3 to August 10, 1973.

An applicant will be admitted who:

a holds a university degree approved for admission to the High School Assistants' Type B program,

b i holds an Ontario Interim Elementary School Teacher's Certificate, Standard 4, or

ii holds a Permanent Elementary School Teacher's Certificate, Standard 4, and does not have a contract with a secondary school board, or

iii holds an acceptable teaching certificate other than **i** or **ii** above, or

iv is eligible for a secondary school Letter of Standing but wishes to familiarize himself with the Ontario school system, or

v failed in a one-year program of a Faculty or College of Education but has been given permission by the Council of the Faculty to attend this course to make up a deficiency.

c submits evidence of a negative tuberculin test reading or chest x-ray taken within the year preceding July 3, 1973.

The program will consist of offerings from the following Departments:

Administration and Program Development
Educational Psychology
History, Philosophy, and Sociology of Education
and an appropriate pattern of two secondary school subjects from the following (See Section 32 for prerequisites):

Art
Business Education
Computer Studies
Dramatic Arts
English
French
Geography
History

Home Economics
Latin
Mathematics
Physical and Health Education
Science

High School Assistants' A Seminars

Summer Seminars leading to the following High School Assistant's Certificates, Type A, alone or in combination, will be offered from July 3 to August 10, 1973 (subject to sufficient registration):

Art
Biology
Chemistry
Dramatic Arts
Economics
English
French
Geography
Geology
German
Greek
History
Home Economics
Italian
Latin
Mathematics
Music
Physical and Health Education
Physics
Political Science
Psychology
Russian
Science
Sociology
Spanish

Admission requirements:
1 a High School Assistant's Certificate,
2 the academic requirement as prescribed in the Ministry of Education Memorandum 1970–71:51. (Transcripts will be evaluated by the Office of Advanced Standing of the Faculty of Education),
3 a recommendation from the Ministry of Education as to competence as a classroom teacher of the Type A subject(s) in an Ontario secondary school.
NOTE: If necessary to limit enrolment, preference will be given to candidates who hold Permanent Certificates.
Application for enrolment must be made to the Registrar, Faculty of Education, not later than May 1, 1973.

121. Business Education Summer Sessions

Teachers who wish to enrol in any of the following Summer Sessions should write for application forms to the Director, Business Education Department, Faculty of Education, 371 Bloor Street West Toronto M5S 2R7, and should submit the completed form not later than June 1, 1973.

Summer Sessions leading to Part I, Part II and Specialist in Accountancy, Data Processing, Marketing, or Secretarial will be held at Central High School of Commerce, Toronto, for candidates who hold a High School Assistant's Certificate. Candidates with Elementary School Teaching Certificates may also attend the Intermediate courses.

122. Examinations and Supplementals

Examination Centres:

a Examinations in the non-machine subjects will be held on April 21, 1973, at the Faculty of Education and, if sufficient candidates apply, at Thunder Bay, Sault Ste. Marie, North Bay, Ottawa and Windsor only.

b Examinations in the machine subjects will be held on April 28, 1973, at the Faculty of Education and, if sufficient candidates apply, at Thunder Bay, Sault Ste. Marie, North Bay, Ottawa and Windsor only.

Permission to write will be based on the requirements listed below. Requests to write the examinations should be made to the Director, Business Education Department, before March 1, in the year of writing. The timetable of examinations will be mailed to a candidate when his application is accepted.

Supplementals

A candidate who has failed to obtain standing in the Principles and Practices of Teaching a Business Education subject at a previous session may try the supplemental at the end of the Summer Session.

Requirements for writing examinations:

A candidate may write an examination when

a Intermediate Part I or II Faculty correspondence courses have been successfully completed; or

b Intermediate Part I or II subjects have been taught by the candidate for two years within the last three years as certified by the Principal; or

c Official evidence is presented of the successful completion of Intermediate Part I or II subjects at a night school course, secondary school option course, a business college course, or an approved machine company course.

123. Two-Summer Program Leading to the Commercial-Vocational Certificate, Type B

This is the completing course for this program. It will not be offered again. Candidates requiring this course to complete certification must attend at Toronto in the summer of 1973. No alternative program will be offered in the future for the completion of a Commercial-Vocational Certificate.

The completing course of the Commercial-Vocational two-summer sequence will be offered at Toronto in 1973 commencing July 3 and ending August 3. This course leads to the Interim Commercial-Vocational Certificate, Type B. This certificate is valid in any secondary school for teaching only the commercial subjects named on the certificate.

To this five-week course may be admitted applicants who have completed the first course of this two-summer program.

Applicants who successfully complete this second summer course in 1973 will be granted an Interim Commercial-Vocational Certificate, Type B, (subjects named), valid for five years. A permanent Commercial-Vocational Certificate (subjects named) may be issued after two years of teaching experience if the quality of the teacher's work has been satisfactory and he has completed eight full courses toward an acceptable university degree. Upon completion of the degree, teachers may apply to the Ministry of Education for an Interim High School Assistant's Certificate, Type B, and may proceed toward Commercial Specialist status.

Detailed information regarding this course should be obtained immediately from the Director, Business Education Department, Faculty of Education, 371 Bloor Street West, Toronto M5S 2R7.

ree-Summer ram Leading Commercial- Vocational cate, Type B

This is the completing course for this program. It will not be offered again. Candidates requiring this course to complete certification must attend at Toronto in the summer of 1973. No alternative program will be offered in the future for the completion of a Commercial-Vocational Certificate.

To this course may be admitted applicants who have completed the first and second courses of the Three-Summer Program.

The first and second Courses of the Three-Summer Program have been discontinued. The third Commercial-Vocational Course of the three-summer sequence will be offered at Toronto in 1973, commencing July 3 and ending August 3. This course leads to an Interim Commercial-Vocational Certificate, Type B, which is valid in any secondary school for teaching the Commercial subjects named on the certificate. The course offers preparation in methodology for the subjects of Typewriting, Office Practice, Shorthand, and Marketing.

After the third summer course the successful candidate will receive an Interim Commercial-Vocational Certificate, Type B, (subjects named). This certificate will be valid for five years. A permanent Commercial-Vocational Certificate (subjects named) may be issued after two years of experience if the quality of the teacher's work has been satisfactory and the teacher has completed eight full courses toward an acceptable university degree. Upon receipt of this degree, the teacher may apply to the Ministry of Education for an Interim High School Assistant's Certificate, Type B, and will be eligible to proceed toward Commercial Specialist status.

Detailed information regarding this course should be obtained im-

mediately from the Director, Business Education Department, Faculty of Education, 371 Bloor Street West, Toronto M5S 2R7.

125. Counsellor Education Summer Sessions

The Program, which consists of four parts (Parts I, II, III, IV), leads to the Guidance Specialist Certificate granted by the Ontario Ministry of Education, and will be offered by the Counsellor Education Department, July 3 to August 3, 1973.

ADMISSION REQUIREMENTS:

Part I

1 a certificate qualifying the candidate to teach in an elementary or secondary school in Ontario;

2 evidence of at least one year of successful teaching experience in Ontario, as certified by a superintendent.

Part II

1 successful completion of Part I of the Counsellor Education Program; or

2 an Elementary Guidance Certificate.

Part III

1 successful completion of Part II of the Counsellor Education Program; or

2 an Intermediate Guidance Certificate.

NOTE: An applicant for Part III must also submit evidence, certified by a superintendent, of having one year of successful teaching experience in Ontario, including at least 180 hours of successful guidance and counselling, following completion of Part II of the Counsellor Education Program.

Part IV

Part III of the Counsellor Education Program.

ADVANCED STANDING

Exemption from one or more courses leading to an advanced certificate may be requested upon submission of:

1 transcripts of graduate courses in guidance and/or counselling,

2 evidence of at least one year of successful teaching experience in Ontario, as certified by a superintendent.

ADMISSION

Preference will be given to those with highest qualifications.

Completed application forms must be returned, with necessary documents, not later than April 1, 1973, to the Principal, Summer Courses in Counsellor Education, Faculty of Education, 371 Bloor Street West, Toronto M5S 2R7.

COURSES

Part I (All Candidates)

Developing Interpersonal Skills 486

Introduction to Counselling 488

Part II (for candidates with Kindergarten to Grade 6 responsibilities)
Basic Counselling Practicum 489
Developmental Counselling Services in the Junior School 491
Use and Misuse of Standardized Tests 492

Part II (for candidates with Grades 7 to 13 responsibilities)
Basic Counselling Practicum 493
Career Development and Educational Planning 494
Use and Misuse of Standardized Tests 496

Part III (for candidates with Kindergarten to Grade 6 responsibilities)
The Counsellor and the Community 497
Intermediate Counselling Practicum 498
Group Work in the Junior School 499

Part III (for candidates with Grades 7 to 13 responsibilities)
The Counsellor and the Community 497
Intermediate Counselling Practicum 501
Group Work in Grades 7 to 13 502

Part IV (for candidates with Kindergarten to Grade 6 responsibilities)
Contemporary Issues in Counselling 503
Advanced Counselling Practicum 504
The Counsellor and the Special Needs of the Atypical Junior School Child 506

Part IV (for candidates with Grades 7 to 13 responsibilities)
Contemporary Issues in Counselling 503
Advanced Counselling Practicum 507
Organization and Administration of Counselling Services 508

ramatic Arts Summer Sessions

Three six-week Summer Sessions lead to the Specialist Certificate in Dramatic Arts. The first and second Summer Sessions lead to letters of success indicating successful completion of Parts I and II of the program. The third Summer Session leads to the Specialist Certificate in Dramatic Arts.
Each course will be offered either at (**a**) one of two levels, Foundation and Advanced, OR (**b**) at both levels. Normally, candidates are free to select any three courses for credit toward the Specialist Certificate. Details and application forms may be obtained from the Principal of the Summer School Program, Dramatic Arts Department, Faculty of Education, 371 Bloor Street West, Toronto, Ontario M5S 2R7.

127. Home Economics Summer Session

A course leading to the Intermediate Certificate in Home Economics will be given from July 3 to August 10, 1973. Admission requirements are an Elementary School Teacher's Certificate and evidence of successful completion of five approved university courses in Home

Economics with a standing not lower than 60% or C class, whichever is higher. Beginning in 1974, candidates who have not already started on an approved program of the university courses in Home Economics will be required to have a university degree including the Home Economics courses, before admission to this summer course. This course is given only when a sufficient number of candidates apply.

Applications for this course must be submitted not later than April 1, 1973 to the Principal, Home Economics Summer Courses, Faculty of Education, 371 Bloor Street West, Toronto, Ontario M5S 2R7.

128. Physical and Health Education Summer Sessions

Summer Sessions in Physical and Health Education will be offered in Toronto for men and women.

Intermediate Summer Sessions (Secondary School Teachers)

The program leading to an Intermediate Certificate in Physical and Health Education consists of two Summer Sessions (Intermediate, Parts I and II). These will be held from July 3 to August 10, 1973.

Applicants for admission to the Summer Sessions must hold a High School Assistant's Certificate.

Applicants holding an Elementary Physical and Health Education Certificate granted under former regulations may be admitted to the second Summer Session (Intermediate, Part II).

Specialist Summer Session (Secondary School Teachers)

The Summer Session leading to the Specialist Certificate will be held in Toronto from July 3 to August 10, 1973.

Applicants for admission must hold an Interim High School Assistant's Certificate or a Permanent High School Assistant's Certificate and an Intermediate Certificate in Physical and Health Education, and have taught for a period of at least one year in a secondary school in Ontario, or in Grade 9 or 10 of an elementary school or a separate school in Ontario, or hold a High School Assistant's Certificate and a Supervisor's Certificate in Physical and Health Education.

Applications

Application forms may be obtained from the Chairman of Women's Physical and Health Education, or from the Chairman of Men's Physical and Health Education, Faculty of Education, 371 Bloor Street West, Toronto. Completed application forms must be returned not later than April 1, 1973.

Physical and Health Education Summer Courses for Elementary School Teachers

The following courses leading to the appropriate Ministry of Education certificates will be offered by the Physical and Health Education Departments (Men and Women), July 3 to August 3, 1973:

1 *Elementary, Type B.* Admission requirement: a certificate or Letter of Standing qualifying the applicant to teach in an elementary school in Ontario.
2 *Intermediate, Type B, Part I.* Admission requirement: completion of the Elementary, Type B course or its equivalent.
3 *Intermediate, Type B, Part II.* Admission requirement: completion of Part I of the Intermediate, Type B course.
4 *Supervisor's Course.* Admission requirement: an Intermediate Certificate in Physical and Health Education, Type B, and at least five years' approved teaching experience.
Further information and application forms may be obtained from the Chairman, Physical and Health Education Department (Men's), Faculty of Education, 371 Bloor Street West, Toronto.

Medical Certificates
Each applicant is required to forward by June 15 a medical certificate from his own physician indicating that he is physically fit to take a Summer Session in Physical and Health Education. Applications will not be given final acceptance until this condition has been fulfilled.

129. School Librarianship mer Sessions

Three six-week Summer Sessions lead to the Specialist Certificate in School Librarianship. The first and second Summer Sessions, Parts I and II, lead to the Intermediate Certificate in School Librarianship. The third Summer Session leads to the Specialist Certificate in School Librarianship. The three sessions, which must be taken consecutively, are offered to meet the greatest need; hence all three are not offered every summer, nor consecutively.

Intermediate, Part I
The Program will be offered in Toronto from July 3 to August 10, 1973.
Admission requirements:
1 a High School Assistant's Certificate,
2 evidence of at least one year of successful teaching experience in an Ontario secondary or junior high school.
Application forms may be obtained from the Chairman, School Librarianship Department, Faculty of Education, 371 Bloor Street West, Toronto M5S 2R7. Application must be submitted not later than May 1, 1973.

30. Vocational and Occupational Summer Sessions

Vocational/Occupational (Practical Subjects), Type B, Summer Program for Teachers with Professional Education.
A summer session leading to the Interim Vocational or Occupational (Practical) Certificate Type B will be offered from July 3 to August 17, 1973, at Toronto only, for holders of a Permanent High School Assistant's Certificate, or of equivalent qualifications meeting Min-

istry of Education requirements for Vocational Certification and who have an assignment to teach a vocational-technical course.

The program consists of three parts:
Part I – *Teaching Subjects*
All candidates will take selected topics from the courses:
Methods of Teaching the Technical and Industrial Arts 702
Principles and Practices of Technical Education 703

Part II – *Educational Theory*
Structural and Legal Bases of the Ontario School System 201
Curriculum Development for Technical-Occupational Education 701
Educational Psychology as it applies to Technical Education 706

Part III – *Technical Proficiency Examination*
Theory 720
Every applicant shall be required to pass written examinations designed to test his attainments as a skilled worker in the subject concerned. The examinations shall be on the fundamental principles, operations, processes, and skills of the subject.

Interim Vocational Type A Certificate
A Program leading to the Interim Vocational Certificate Type A will be offered in summer sessions from July 3 to August 3, 1973.

Eligibility:
The program is open to a candidate who:
holds a Permanent Vocational Certificate Type B; submits a statement from the Director or Superintendent of Education concerned that he has taught satisfactorily for at least two years; and meets the academic requirements outlined in the Ministry of Education memorandum 1967–68:30. A copy of this memorandum is available from the Faculty of Education.
The completing session will be open to a candidate who:
obtains standing in the initial session; or holds an approved four-year degree in Applied Science (B.SC., or B.A.SC.), Architecture (B.ARCH.) or Nursing (B.SC.N.), and an Interim Vocational Certificate Type B, and who submits a statement from the Director of Education concerned that he has taught satisfactorily for a minimum of one year.
NOTE: A candidate in the latter category will take a special program.

Program of Studies:
A candidate will complete six courses consisting of four Professional Development courses and two Technological or equivalent courses.

Interim Occupational Type A Certificate (Practical Subjects)
The initial and completing summer sessions leading to the Interim Occupational Certificate Type A (Practical subjects) will be offered from July 3 to August 3, 1973.

Eligibility:
The initial summer session will be open to a candidate who:
holds a Permanent Occupational Certificate Type B (Practical Subjects); submits a statement from the Director of Education concerned that he has taught satisfactorily for at least two years; and meets the academic requirements outlined in Ministry of Education memorandum 1967–68:30. A copy of this memorandum is available from the Faculty of Education.
The completing session will be open to a candidate who obtains standing in the initial session.

31. Details of Courses in the mer Programs he Vocational Occupational Certificates, Type A

Vocational Type A Courses: 750, 751, 752, 753, 758, 759
Occupational Type A Courses: 750, 753, 755, 756, 757, 758, 794, 795

Professional Development Courses

750 *Comparative Education*
An introduction to education in other Canadian provinces and other countries, providing a framework for comparison with the Ontario system. An examination of the similarities and differences currently exhibited by the educational systems in Canada, the United States, the United Kingdom and Russia will focus on such major topics as tradition, social change, resources, constitutions, nationalism, selection of elites, urbanization and technology.

751 *Curriculum Development*
An examination of the theory of curriculum development in the field of vocational education through an analysis of individual and group behaviour, using Getzels' social role model as a basis for the study, and the effects upon the schools of current plans for curriculum development by local groups and the Ministry of Education. Topics include definitions of curriculum, influences affecting curriculum designs, and evaluation of curriculum.

752 *Test Construction and Educational Measurement*
The first part of this course provides opportunities for teachers to practice construction of valid and reliable testing instruments, for use in classroom practice. The second part uses basic statistical techniques to clarify and evaluate results obtained in classroom test situations.

753 *Philosophy of Education*
An attempt to answer the question "What are the proper aims of education?" by examining the basic metaphysical, moral and political issues through a study of selected readings by such thinkers as Plato, Locke, Rousseau, Kant, Dewey, Whitehead, Russell, Maritain and Hook.

755 *Problems in Special Education*
An exploration of the origin of and solutions for philosophical attitudes and managerial methods contributing to school oriented problems peculiar to the practical subject areas of the school system. Discussion topics are largely based upon experiences provided by class members.

756 *Society and the School*
An exploration of the role of the school as an agent of modern society and its functions in the development of youth based on the interaction of varying cultures, moral standards and attitudes of different cultural and socio-economic groups.

757 *Mental Health and Hygiene*
A course based on the premise that sound mental health is necessary to successful progress in education. A study will be made of the effects on the learning processes of students by factors such as behaviour mechanisms, social influences on personality and adjustments to varied situations.

758 *Supervision*
An introductory course for teachers who wish to acquire a greater awareness of the characteristics, skills and trends of supervisory relationships. Leadership, human relations, individual and group behaviour, organizational goals, efficiency, and communication will be discussed.

759 *Administration*
A study of the administrative functions within the secondary school system of Ontario. School administration, organization, timetabling, problem solving, decision making, as well as personnel selection, development and effectiveness will be discussed.

794 *Special Education I*

795 *Special Education II*

Technological Courses

The following technological courses are offered to Vocational Type A and Occupational Type A candidates.

Electrical and Electronics I 770
Electrical and Electronics II 771
Fashion and Design I 772
Fashion and Design II 773
Fluid Power I 774
Fluid Power II 775
Fluid Power III 776

Graphic Arts I 777
Graphic Arts II 778
Mathematics I 779
Mathematics II 780
Mechanical Technology and Engineering Science I 781
Machine Tool and Workshop Technology II 782
Thermal Engineering II 783
Advanced Welding II 784
Machine Design II 785
Engineering Graphics II 786
Vocational Art I 787
Vocational Art II 788
Wood Technology I 789
Wood Technology II 790
Wood Technology III 791
Special Education I 794
Special Education II 795
Photography 796
Automotive Technology 797

NOTE:
Applications must be received not later than June 1, 1973, for any Vocational or Occupational Summer Session mentioned above. Application should be made to the Director, Technical and Industrial Arts Department, Faculty of Education, 371 Bloor Street West, Toronto M5S 2R7.

2. Industrial Arts Summer Sessions

Programs leading to Industrial Arts Certificates

Elementary Certificate
Part I and Part II of the two-summer program leading to the Elementary Industrial Arts Certificate will be offered from July 3 to August 17, 1973.

Intermediate Certificate
Part III of the three-summer program leading to the Interim Intermediate Industrial Arts Certificate will be offered from July 3 to August 3, 1973.

Specialist Certificate
Part I, Part II, and Part III of the three-summer program leading to the Interim Specialist Industrial Arts Certificate will be offered from July 3 to August 3, 1973.

. Conditions f Admission, Elementary Certificate

To Part I may be admitted a teacher who holds a certificate or a Letter of Standing qualifying him to teach in an elementary or secondary school in Ontario.
To Part II may be admitted a candidate who has successfully completed Part I.

NOTE:
A candidate admitted to a Program who holds a Letter of Standing may not be issued a certificate until he holds a basic Ontario teaching certificate.

134. Elementary Certificate

The program consists of two parts:
Part I
Design Technology I 600
Design Environment I 602
Fabrication and Production I 604
Material Science I 606
Curriculum Development I 608
Philosophy I 610
Administration I 612

Part II
Design Technology II 601
Design Environment II 603
Fabrication and Production II 605
Material Science II 607
Curriculum Development II 609
Philosophy II 611
Administration II 613

135. Conditions of Admission, Intermediate Certificate

To Part III may be admitted a candidate who has successfully completed Part II of the Intermediate program.
NOTES:
Part III is being offered in 1973 for the last time.
A candidate admitted to a Program who holds a Letter of Standing may not be issued a certificate until he holds a basic Ontario teaching certificate.

136. Intermediate Certificate

Intermediate Certificate
Part III
Curriculum Development 630
Material Science 632
Design Technology 640
Design Environment 645
Fabrication and Production 650

137. Conditions of Admission, Specialist Certificate

To Part I may be admitted a candidate who:
a holds an Interim Intermediate Industrial Arts Certificate with an average of B standing in the Intermediate Industrial Arts Program, and
b has taught Industrial Arts successfully for one year subsequent to obtaining the Intermediate Certificate as confirmed by the Director of Education concerned, and
c has seven Grade 13 credits (two of which shall be English or Français) or equivalent as approved by the Faculty of Education.

To Part II may be admitted a candidate who has passed Part I.
To Part III may be admitted a candidate who has passed Part II.

38. Specialist Certificate

Specialist Certificate
The program consists of three parts:
Part I
One of the teaching subjects listed below, and two of the Educational Theory courses listed below.
Part II
One of the teaching subjects listed below, and two of the Educational Theory courses listed below other than those selected in Part I
Part III
One of the teaching subjects listed below, and two of the Educational Theory courses listed below other than those selected in Parts I and II.

Teaching Subjects
Architectural Drawing and Building Construction 660
Communciations 661
Electricity Technology 662
Electronics Technology 663
Fabrication and Production – Junior Grades 664
Foundation Design 665
Mechanics 666
Metal Fabrication and Production 667
Modern Materials 668
Plastics Fabrication and Production 669
Recreational Activities – Crafts 670
Recreational Activities – Outdoors 671
Science Technology 672
Wood Fabrication and Production 673

Educational Theory
Special Topics in Creativity 123
Experience and Education 261
Comparative Education 750
Creativity and Problem Solving 681
Curriculum Development in Industrial Arts 682
Introduction to Research Techniques 684
Individual Research Project 686
Research Techniques 687

139. Details of Courses in the mer Programs the Industrial s Certificates

Elementary
600 *Design Technology 1*
Electricity: Introduction to sources characteristics, measurement, and control of electricity; methodology and teaching techniques. Lecture and laboratory.
Mechanics: An introduction to the sources, transfer, and control of power; methodology and teaching techniques. Lecture and laboratory.

601 *Design Technology 2*
Electricity: Application of electrical principles in home, school, and industry; methodology and teaching techniques. Lecture and laboratory.
Mechanics: Application of mechanical principles through problem solving; methodology and teaching techniques. Lecture and laboratory.

602 *Design Environment 1*
Design foundation: structural basis of form – line, plane, mass; methodology and teaching techniques. Lecture and laboratory.
Communication: descriptive drawing, sketching, and photography as a means of observation; recording and communication of individual perceptions; methodology and teaching techniques. Lecture and laboratory.

603 *Design Environment 2*
Design foundation: Application of the elements of structure – line, sheet, solids, modules; methodology and teaching techniques. Lecture and laboratory.
Communication: Further development of principles of communication through drawing and presentation, technical drawing, and photography; methodology and teaching techniques. Lecture and laboratory.

604 *Fabrication and Production 1*
The development of basic skills in the use of hand tools and machines for the elementary grade levels utilizing natural and synthetic materials; methodology and teaching techniques. Lecture and laboratory.

605 *Fabrication and Production 2*
Further development of basic skills in the use of hand tools and machines for the elementary grade levels through a problem-solving approach; methodology and teaching techniques. Lecture and laboratory.

606 *Material Science 1*
The study of the structure and properties of natural and synthetic materials. Methodology and teaching techniques. Lecture and laboratory.

607 *Material Science 2*
Further study of the structure and properties of natural and synthetic materials; methodology and teaching techniques. Lecture and laboratory.

608 *Curriculum Development 1*
Investigation, interpretation, and implementation of current Industrial Arts programs for the elementary level. Lecture and assignment.

609 *Curriculum Development 2*
A study of the factors involved in the development of an appropriate elementary Industrial Arts program. Lecture and assignment.

610 *Philosophy 1*
Part I of a study of contemporary aims, problems and practices in Industrial Arts education at the elementary level. Lecture and seminar.

611 *Philosophy 2*
Part II of a study of contemporary aims, problems and practices in Industrial Arts education at the elementary level. Lecture and seminar.

612 *Administration 1*
Principles of classroom management relating to records, equipment, supplies, housekeeping, and safety. Lecture and seminar.

613 *Administration 2*
Examination of administrative problems relating to management of budget, equipment, supplies, and records. Lecture and seminar.

Intermediate
See descriptions of courses for full year programs, Section 101.

Specialist
See descriptions of courses for full year programs, Section 102.
Further information, and application forms may be obtained from The Director, Technical and Industrial Arts Department, Faculty of Education, 371 Bloor Street West, Toronto, Ontario M5S 2R7.

Occupational Trades Summer Sessions

If a sufficient number of candidates apply, a six-week program commencing July 3 and ending August 10 (two weeks for each subject) leading to the Interim Occupational Certificate, Type B (Practical Subjects) will be offered in Toronto only, in the following subjects: Care of the Sick and Family Care, Custodial Services, Electrical Appliance Repair, Food Preparation and Hygiene, Painting and Decorating, Personal Grooming, Retail Sales, Rough Carpentry, Service Station Operation, Sewing and Alterations, Small Engines, Trowel Trades, Waiter and Waitress Training, and Welding.
To this program may be admitted candidates who meet the general admission requirements, and in addition:

i hold an Interim or Permanent Elementary School Teacher's Certificate and have three years of related industrial experience, or
ii hold an Interim or Permanent Elementary School Teacher's Certificate and an Intermediate Home Economics Certificate, or
iii hold an Interim or Permanent Elementary School Teacher's Certificate and an Intermediate Industrial Arts Certificate, or
iv hold an Interim Vocational Certificate, Type B, or
v have standing in all professional courses leading to an Interim Vocational Certificate, Type B, and not less than 40% average on the Technical Proficiency Examinations and have had approved practical experience in three occupational or service trade areas, and
vi have a contract to teach Occupational (Practical Subjects) for the 1973–74 school year.

Before candidates for the above-mentioned program may be recommended for certification they:
i will be required to pass three Technical Proficiency Examinations following the final summer program, and
ii will submit acceptable Subject Analyses, Courses of Study, Shop Plans, and Equipment Lists.

NOTE: Candidates who do not have the necessary work experience will be required to take a second six-week program of practical subjects.

To Part II may be admitted candidates who have completed Part I.

141. Attendance at Summer Sessions

Owing to the compact nature of the Summer Sessions, absenteeism cannot be tolerated except for reasons of health and then only for a maximum of five days supported by a medical doctor's statement. This regulation applies to all candidates attending all Summer Sessions.

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	Engineering at Toronto—descriptive brochure
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RTS AND SCIENCE—	Faculty of Arts and Science— St. George Campus
	Scarborough College Calendar
	Erindale College Calendar
HILD STUDY—	Institute of Child Study, Faculty of Education
ENTISTRY—	Faculty of Dentistry
	Division of Postgraduate Dental Education
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DUCATION—	Faculty of Education
	Bachelor of Education in Extension
	Graduate Degrees in Education*
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ANAGEMENT STUDIES—	Faculty of Management Studies
EDICINE—	Faculty of Medicine, Medical Course
	Department of Rehabilitation Medicine
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	Royal Conservatory of Music Year Book
URSING—	Faculty of Nursing
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HYSICAL AND HEALTH EDUCATION—	School of Physical and Health Education
OCIAL WORK—	Faculty of Social Work

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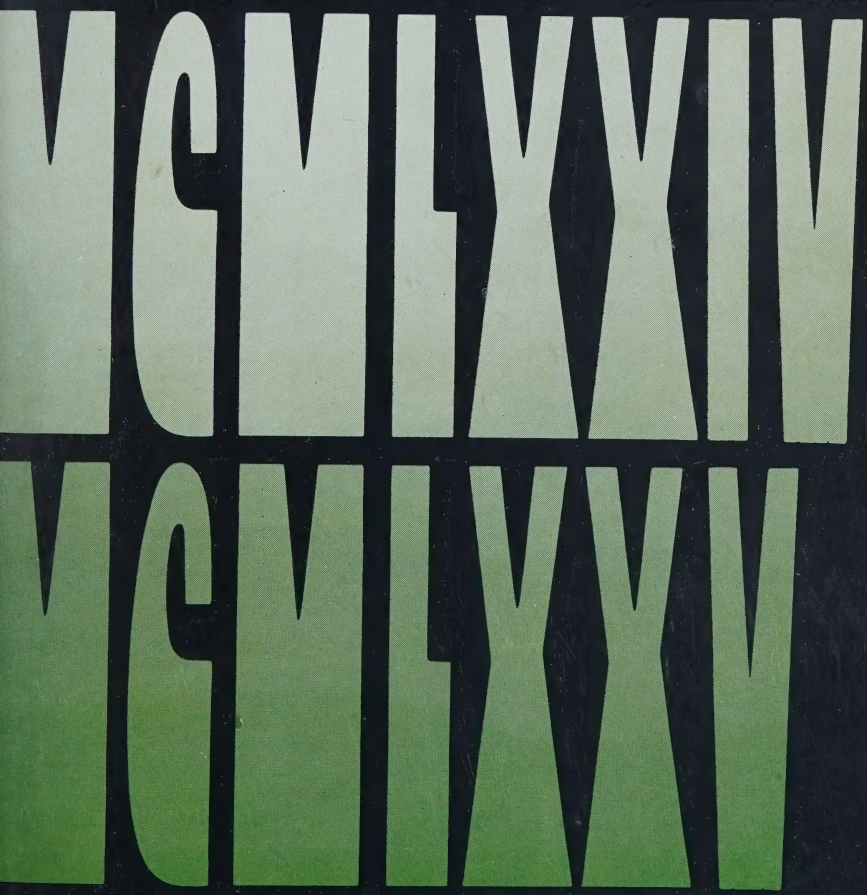
Faculty of Education

University of Toronto

Calendar 1974-75



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Faculty of Education
University of Toronto
Calendar 1974–75

Inquiries concerning courses at the Faculty of Education should be addressed to the Registrar, Faculty of Education, 371 Bloor Street West, Toronto Ontario M5S 2R7.

The Council of the Faculty reserves the right to withdraw any course or program listed in this calendar, or to limit the enrolment.

In view of increasing costs of supplies and labour, fees and other charges set forth in this calendar are subject to change by the Governing Council.

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Academic Calendar, 1974–1975

Fall Term, 1974

September 11, 12	Registration, Institute of Child Study
September 16 to 21	Registration Week
September 16	Classes begin, Institute of Child Study
September 23	Classes begin
October 14	Thanksgiving Day
December 20	Classes end
December 31	Last date for accepting applications for supplemental teaching and practical tests

Spring Term, 1975

January 2	Last date for receiving the second instalment of fees
January 6	Classes begin
March 17 to 21	Reading Week
March 28	Good Friday
March 31	Spring Program, Vocational and Occupational, begins
April 11	Classes end, Institute of Child Study
April 25	Classes end
April 28 to May 9	Final examinations
May 1	Institute of Child Study course work must be completed; supervised field practice may be arranged or required during May.
May 12	Spring Program, Intermediate Industrial Arts, begins
June 21	Last date for accepting applications for August supplemental written examinations

Academic Calendar, Summer Session, 1974

2 to August 2	Business Education: Intermediate Accountancy, Data Processing, Marketing, and Secretarial, Parts I, II, and Specialist
2 to August 2	Counsellor Education: Parts I, II, III, IV
2 to August 9	Dramatic Arts: Parts I, II, and Specialist
2 to August 9	High School Assistants' Summer Program for Teachers with Professional Education
2 to August 9	High School Assistants' Type A Seminars
2 to August 9	Home Economics Intermediate Course for qualified Elementary School Teachers
to August 16	Industrial Arts: Elementary, Parts I and II
2 to August 2	Industrial Arts: Specialist, Parts I, II, and III
2 to August 9	Occupational, Type B (Practical Subjects), Trades Program: Parts I and II
2 to August 2	Occupational, Type A (Practical Subjects): Parts I and II
y 2 to July 26	Outdoor Education
2 to August 9	Physical and Health Education (Women): Intermediate Parts I, II, and Specialist
and August 9	Physical and Health Education (Men): Intermediate Parts I, II, and Specialist
2 to August 2	Physical and Health Education for Elementary School Teachers: Elementary, Intermediate Parts I, II, and Supervisor's
to August 16	Vocational, Type B, for candidates with approved professional training
2 to August 2	Vocational, Type A: Parts I and II
2 to August 2	Vocational, Type A: Special one-summer program for holders of Applied Science degrees
2 to August 2	Supplementary Vocational School Teachers' Program

Historical Note

When secondary education in Upper Canada was officially introduced in 1807, qualifications for teachers were ill-defined and professional training was non-existent. Nevertheless, a surprising number of 'educated gentlemen' found their way into the classrooms of the District Grammar Schools. Unfortunately, the supply of these superior pedagogues failed to keep pace with the growth of the population and the subsequent increase in schools. But in spite of the difficulties encountered, no serious attempt to provide teacher training was made for more than half a century.

Beginning in 1858, several experiments involving model schools and training institutes were conducted with the aim of improving the academic and professional qualifications of teachers. None of these endeavours met with any widespread satisfaction, and in 1890 all such operations were supplanted by a provincial School of Pedagogy in Toronto. Seven years later this institution was moved to Hamilton and renamed the Ontario Normal College.

In 1906, the training of secondary school teachers was modified drastically when Faculties of Education were organized at the University of Toronto and at Queen's University. In Toronto, the Faculty offered professional secondary school courses in Pedagogy. In order to improve the practical and experimental aspects of its program, the Faculty established, in 1910, the University of Toronto Schools, to serve as a practice school.

This pattern of teacher training continued until after the close of World War I. In 1920, it came to an abrupt end when the Faculty of Education at Queen's was discontinued and the Faculty at Toronto was designated as the Ontario College of Education, University of Toronto.

In the following years the College expanded its program, services, and facilities, and added a number of important departments: the Guidance Centre in 1943, the Vocational and Industrial Arts Department in 1946 and the Office of Advanced Standing in 1957.

During a period of forty-five years the Ontario College of Educatio

was the sole institution in the province for the preparation of secondary school teachers. In 1965, the situation altered with the opening of Althouse College of Education, The University of Western Ontario. Since then several other Faculties of Education have been established in Ontario.

In 1966, the Departments of Graduate Studies and Research were transferred to the Ontario Institute for Studies in Education. In the same year a new agreement for the operation of the Ontario College of Education was made between the Minister of Education and the University of Toronto, establishing a College Council and Advisory Board. By the same agreement, the name was changed to *The College of Education, University of Toronto*. Since that time there has been further expansion with the addition of the Educational Media Centre in 1966, the Department of Computer Studies in 1968, and the Institute of Child Study in 1971. Effective July 1, 1972, the College was formally designated as the *Faculty of Education, University of Toronto*.

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Dean (1963-73)	D. F. Dadson, B.A., B.ED.
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Administrative Assistant to the Dean	G. Mitchell, B.A.

Faculty of Education
Academic Staff 1973–74

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tant Professor R. A. Martin, B.A.SC., M.ED., PH.D.
tant Professor Agnes Teresa Sheehan, B.A., M.ED., PH.D.
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Lecturer	J. G. A. Jameson
ıpervisor, Technical Proficiency Evaluation	E. Gascoigne, P.ENG.

Library

Chief Librarian	Mary C. Shortt, B.A., M.L.S.
Librarian	Joan M. Clement, B.A., B.L.S.
Librarian	Diana C. George, B.A., B.L.S.
Librarian	Ketha J. McLaren, B.A., M.L.S.
Librarian	Jennifer M. Wentworth, B.A., M.L.S.
Librarian	Nancy D. Young, B.A., B.L.S.

Staff of the Institute of Child Study 1973–74

Academic and Research Division

Professor and Director	M. F. Grapko, M.A., PH.D.
ociate Professor	A. J. Biemiller, M.S., PH.D.
ociate Professor l Principal of the boratory School	J. Fair, B.A., B.P.E., M.ED., PH.D. (cross-appointment, Physical and Health Education)
ociate Professor	Betty Flint, DIP.C.S., M.A.
sistant Professor	Dvora Frumhartz, M.A., PH.D.
sistant Professor	J. P. Klein, M.A., PH.D.
sistant Professor	Ruth Pike, B.S.W., M.A., PH.D.
sistant Professor	Ada Schermann, M.SC.
sistant Professor	R. J. Volpe, M.A., PH.D. (cross-appointment, Educational Psychology)
Lecturer	Frances Biemiller, DIP.C.S., M.S.
Lecturer	Jennifer Hardacre, DIP.C.S., M.ED.
Lecturer	Margaret L. Kirkpatrick, M.A.
Lecturer	Marcia A. Penner, B.A., DIP.C.S.
Special Lecturer	Jacqui B. Latter
Librarian	Miriam Herman, B.A.

Staff of University of Toronto Schools 1973–74

Principal and Associate Professor	H. D. Gutteridge, M.A.
Assistant Principal	C. D. S. Bate, B.A.SC., M.ED.
Art	D. F. Boutros, B.A.
Classics	H. C. Maynard, M.A. K. E. Prentice, M.A.
English	S. H. Bull, M.A. P. A. Grudzien, B.A., B.ED. Norah E. M. Maier, M.A. W. R. H. Montgomery, M.A., PH.D.
Geography	Lynda S. Duckworth, B.A., B.ED.
History	N. T. McLean, B.A. R. J. Stewart, B.A.
Mathematics	G. A. Fleming, B.A., M.ED. N. D. Fox, B.COM. J. A. Vanstone, B.A.
Modern Languages	P. F. L. Gallant, M.A. F. W. Ignatz, B.A. R. J. Moorfield, M.A. W. A. Stickland, B.A.
Music	G. F. FitzGerald
Physical and Health Education	G. H. Adams, B.P.H.E., B.ED. Jean F. Becroft, B.SC., M.A. W. M. Simons, B.P.H.E., DIP.P.E., M.ED. J. Stulac, B.P.H.E., B.A.
Science	C. E. B. Le Gresley, B.A., M.ED. F. M. Speed, B.SC.S., B.ED.
Librarian	T. J. Boucher, B.A., M.S.L.S.
School Counsellor	C. W. M. Pace, B.A., B.S.W. (cross-appointment, Counsellor Educa tion)

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General Information

1. Location of the Faculty of Education

The Faculty of Education is located at the corner of Bloor Street We and Spadina Avenue, in the northwest sector of the St. George Cam pus, University of Toronto. Mailing address of the Faculty is 371 Bloo Street West, Toronto M5S 2R7.

2. Function of the Faculty of Education

The basic function of the Faculty of Education is the training o teachers for professional service in elementary and secondary school especially in the schools of Ontario. Programs of the Faculty lead t *basic certificates* required for teaching in the high schools, collegia institutes, vocational schools and elementary schools of Ontario, and number of courses lead to *additional certificates* in areas of subje specialization. Teaching certificates are issued by the Ontario Ministr of Education on the recommendation of the Council of the Faculty.

3. Faculty Facilities

The Faculty of Education is equipped with classrooms, lecture rooms library, laboratories and gymnasia, an educational media centre with television studio and mobile television unit, language laboratories, theatre studio, a computer centre and a typing laboratory.

4. Faculty Library

Students will find in the Library a major collection of books an periodicals on all aspects of secondary and elementary education, a well as small working collections on the various subjects taught i Ontario schools. In addition to its loan facilities, the Library provides reference service to assist students in locating material on educationa psychology, school administration, and methods of teaching specifi subjects.

The Library's selected collection of mounted pictures, filmstrips pamphlets, slides, recordings and document kits is available to th students for use both in demonstration lessons at the Faculty and i their practice teaching assignments at outside schools. Facilities fo previewing audiovisual aids are provided in the Library.

Students at the Faculty are entitled to use the main University o Toronto Library, where they can obtain extensive material on subject other than education.

5. Health Centre

The Faculty's Health Centre, in charge of a registered nurse, offers t students first aid, counsel with health problems, and referrals to do

tor, dentist, or hospital as appropriate. The Centre is open each week during the session, Monday through Friday, from 8.30 a.m. to 3.30 p.m., Room 115.

The Student Governments of the Faculty

The H.S.A. Student Assembly is concerned with all matters pertaining to students of the Faculty. It maintains a year-round office at 703 Spadina Avenue, to provide continuity of organization in student affairs.

The Technical and Industrial Arts Student Council organizes extra-curricular activities for its students, and acts on their behalf in any matter that may arise relating to the Technical and Industrial Arts program.

The Institute of Child Study has a five-member Student Council, whose purposes include providing students with an opportunity to express their ideas, giving them a voice in the decision-making bodies at the Institute, and maintaining channels of communication between students and staff.

Through their governments, all students have voting members on the Council of the Faculty and its committees. They are also represented on the Students' Administrative Council of the University.

University of Toronto Schools

The University of Toronto Schools, established in 1910 as a division of the Faculty of Education, is a day school for students from Grade 7 to Year 4. The normal enrolment is 420 students, selected by competitive examination. The Ontario curriculum leading to university entrance is followed, with opportunities provided for enrichment, acceleration, independent study and experimentation. Resources of the school are available to staff and students of the Faculty for teaching practice, demonstration and experiment.

8. Guidance Centre

The Guidance Centre produces and distributes standardized tests and other educational materials for teachers and guidance counsellors. It is located at 1000 Yonge Street, Toronto M4W 2K8 (928-3210).

9. Language and Medical Regulations

Facility in English. An applicant whose first language is other than English may be required to pass the Communication Test for Teaching in the English Language. The test will be conducted by a committee composed of representatives of the Ontario Secondary School Teachers' Federation, the Department of English of the University of Toronto, and the Council of the Faculty.

The Faculty is prepared to consider other evidence that may be submitted to the Registrar for evaluation.

Physical Unfitness of Candidates. On the Dean's report to the Minister of Education as to the physical unfitness of a student for training as a teacher, the Minister may require a special medical examination, and, as a result thereof, may direct that he be not eligible for recommendation for a Ministry of Education certificate.

10. Fees *Fees for the High School Assistants' Program and Technical and Industrial Arts Programs of the one-year session*

	Men	Women
Academic Fee	$580	$580
Incidental Fees (Hart House, S.A.C., Athletic, Health Service, Student Union)	$ 74	$ 64
Total Fees (if paid in one instalment)*	$654	$644
First Instalment, due September 13*	$434	$424
Second Instalment, due January 2 (includes $12 deferred payment charge)	$232	$232

* Deduct $50 deposit if paid in advance.

Academic Fee for the Technical and Industrial Arts Spring Programs Vocational/Occupational, Type B

First Instalment, due April 1, 1974	$460
Second Instalment, due July, 1975	$120
Industrial Arts, Intermediate, due May 13, 1974	$280

NOTES:

1 An applicant who is admitted to the Faculty will be required to pay at least the first instalment of fees by September 13, 1974, and before applying to the Faculty Registrar for his registration card.

2 The fee for students attending the spring term is $290 plus Incidental Fees.

3 After January 15 an additional deferred payment fee of $10 will be imposed. On March 1 an additional 1% per month charge will apply.

4 An applicant who applies after the last date for application to any course listed in this calendar may be assessed a late fee of $20 if he is admitted to the course.

5 Special fees of $25, cheques payable to the University of Toronto and to be collected the first day of the course: *Outdoor Education* 115, to cover the cost of field trips and an Outdoor Education weekend; *Culture and Society as They Relate to the Teaching of French* 129, to cover the travel cost of a field trip to the province of Quebec.

6 A candidate who withdraws before the end of his course will be charged fees in proportion to the period of his attendance, i.e. up to the effective date of withdrawal. After twenty weeks no fees will be refunded.

For Supplemental Examinations

Fees for each supplemental examination in any course except High School Assistants', Type A	$10
Fee for the supplemental examination(s) for any High School Assistant's Certificate, Type A	$20

For Summer Sessions

Summer Program for Teachers with Professional Education	$120

Special Student, one subject	$ 50
Type A Seminars	$120
Business Education	
Intermediate Parts I, II, and Specialist, each	$100
Counsellor Education	
Parts I, II, II, and IV, each	$100
Dramatic Arts	
Parts I, II, and Specialist, each	$120
Home Economics	
Intermediate Course for qualified Elementary School Teachers	$120
Industrial Arts	
Elementary, Parts I and II, each	$140
Specialist, Parts I, II, and III, each	$100
Physical and Health Education	
For Secondary School Teachers	
Intermediate Parts I, II, and Specialist, each	$120
An extra fee will be charged for Outdoor Education, taken in conjunction with a Physical and Health Education Course.	
For Elementary School Teachers	
Elementary, Intermediate Parts I, II, and Supervisor's, each	$100
Vocational and Occupational	
Type B for candidates with approved professional training	$140
Type A, Parts I and II, each	$100
Occupational Trades, Two-week Sessions, each	$ 40
Supplementary Vocational Certificate	$100

11. Academic Records, Examinations, and Rights of Students

Examinations

No candidate will be permitted to take more than twice any final examination, or part thereof, for any degree or certificate listed in this calendar, except by permission of the Council of the Faculty.

Checking of marks

The Faculty policy is *not* to re-read or re-evaluate any examination paper or essay after results have been issued. Papers are re-read in each examination in which a mark of less than 50 per cent has been assigned. Papers in which at least 50 per cent has been obtained will not be re-read.

All results are carefully reviewed before being released. However, the clerical work involved in the department and in the Registrar's Office will be checked if a petition is submitted through the Registrar's Office, with a fee of $5 per course. The fee will be refunded if an error is found.

Plagiarism
Plagiarism is a serious offence and is subject to disciplinary action.

Results withheld
Students who have not paid their fees or residence dues in full or who have outstanding library dues or bookstore accounts by the end of the session will not be permitted further registration in the University, will not have transcripts issued on their behalf, and will not receive their diplomas or recommendations for the High School Assistant's certificate until payment is made.

Transcripts
Transcripts of academic record are furnished by the Faculty Registrar's Office on payment of $1 each. For each additional copy ordered at the same time, the fee is 50¢.

Academic rights of students
An appeal to the Council of the Faculty shall be permitted against failure or a Faculty ruling regarding procedure for fulfilling the requirements of the Bachelor of Education degree or a Ministry of Education certificate. An appeal may be based on academic or compassionate grounds.
Procedure: A student is required to submit, before the end of the calendar year, a written appeal to the Council of the Faculty of Education.
A student wishing to appeal a decision of the Council of the Faculty should direct his inquiry to the Secretary, Sub-Committee on Academic Appeals, Office of the Governing Council.

12. Certification

For information regarding Ministry of Education regulations, inquiries should be made direct to the Education Records Branch, Ministry of Education, Mowat Block, Queen's Park, Toronto, M7A 1L8.

The High School Assistant's Certificate, Type B, is awarded by the Ontario Ministry of Education, and qualifies the holder to teach academic and general subjects in the secondary schools of Ontario. The Interim Certificate may become a Permanent High School Assistant's Certificate upon completion of two years' successful teaching experience in an Ontario secondary school.

Additional certificates or credits may be granted to a candidate in the Program for the Type B certificate, provided that the student is awarded the High School Assistant's Certificate, Type B.

No candidate will be awarded a Type A certificate before he has been awarded a High School Assistant's Certificate, Type B.

All certificates referred to in this calendar are Interim, not Permanent, when issued.

13. University Facilities

Students registered for courses in the Faculty of Education may use the University's Athletic facilities, and Hart House, under such conditions

as obtain with other students. They will also be admitted to the Royal Ontario Museum and to the Art Gallery of Ontario, on presentation of their registration cards.

14. University Health Service

Any student may consult a staff physician at the Health Service 9 a.m. to 5 p.m., Monday to Friday while the University is in session. The University does not accept any responsibility for injuries sustained by students while engaged in Physical Education classes or in University athletic activities, but through the Health Service provides for treatment within the following limits: minor injuries are treated at its offices; treatment for more serious injuries will be provided if such treatment is given under the direction and care of staff retained by the Health Service. Treatment is limited to students who suffer accidents while engaged in and which arise out of University Physical Education classes and athletic activities.
Health Service, 256 Huron Street, 928-2459 (Men), 928-2456 (Women)

15. University Advisory Bureau

The Advisory Bureau is prepared to aid in all problems of a personal nature, as well as interpersonal relationships. The staff consists of a psychiatrist, a psychologist, and a group of counsellors. The Advisory Bureau is located at 631 Spadina Avenue (928-2684).

Housing Service

The University of Toronto maintains a listing of rooming houses, flats, apartments and homes. Information on these may be obtained through the Housing Service office at 49 St. George Street, Toronto M5S 1A1.

Bachelor of Education and High School Assistants' Programs

One-Year Program leading to the Bachelor of Education Degree and to the High School Assistant's Certificates

7. Bachelcr of cation Degree and Type B Certificate

a The degree of Bachelor of Education will be awarded by the University of Toronto to students on successful completion of the one-year program which leads also to the High School Assistant's Certificate, Type B, awarded by the Ontario Ministry of Education.

b A graduate of the one-year program leading to the Vocational Certificate, Type B, or the Occupational Certificate, Type B (Practical Subjects), who holds an approved degree from a recognized university, will be recommended also for the Bachelor of Education degree. (See Section 56)

18. Admission Requirements

The basic requirement for admission to the program leading to the Bachelor of Education degree, and to the High School Assistant's Certificate, is an approved university degree from an accredited university.

The applicant's university degree program must include at least 45 credits in arts, science or commerce subsequent to Grade 13, or equivalent.

The definition of a credit is derived from the basic assumption that there are approximately 60 credits in a four-year course. From this it follows that 15 credits are equivalent to a university year, and a credit may be defined as one-fifteenth of a university year.

An applicant for admission to the program for a High School Assistant's Certificate, Type B, shall make application to the Registrar, Faculty of Education, on an official form to be obtained from the Registrar. The closing date for receipt of applications is April 1, 1974.

With the completed application form, the following must be submitted:

1 *An official transcript* showing proof of graduation from a university, after a regular university program, approved as to admission requirements and content of the undergraduate courses.

2 *A birth certificate.* An applicant must be 20 years of age before October 1 of the year in which he applies for admission. If not born in Canada, the applicant must submit a certificate from a competent authority that he is a Canadian citizen, or has Landed Immigrant status. A married woman applying for admission must also submit a photostatic copy of her marriage certificate to substantiate change of name.

3 *Evidence of a negative tuberculin skin test reading or chest x-ray* taken within the year preceding September 16, 1974.

Admission acceptances must be confirmed, in writing, to the Registrar of the Faculty of Education within twenty-one days of the date of acceptance by the Faculty, accompanied by a certified cheque or money order for $50 payable to the *University of Toronto*. This deposit will be applied to the applicant's fee. $40 of the deposit will be refunded if the applicant withdraws his application, in writing, on or before July 31, 1974. The full deposit is refundable if the applicant is denied admission because of failure to graduate.

19. Admission of Foreign Students

The Faculty welcomes qualified overseas students who plan to return to their own countries on completion of their studies. Efforts are made to meet their special needs insofar as the resources of the Faculty permit. Foreign students and others *who are candidates for the Bachelor of Education degree but not for a teaching certificate of the Ontario Ministry of Education* must comply with such conditions of admission as the Council of the Faculty may determine. One of the requirements may be the passing of the Communication Test for Teaching in the English Language. (See section 9)

20. Pre-Session bservation Period

It is advisable for all those who intend to become students in the one-year program of the Faculty to spend a period of time in a school in order to observe its organization, daily routines, and especially the various teaching activities and techniques. The acceptable time for this observation is in the spring prior to the beginning of the fall term of the Faculty. Permission must be obtained beforehand from the principal of the school concerned.

21. Program of ;tudies, leading to the Bachelor of Education Degree d the High School Assistant's ;ertificate, Type B

The program consists of four parts:

Part I	TEACHING SUBJECTS	TWO subjects
Part II	EDUCATIONAL THEORY	**a)** Structural and Legal Bases of the Ontario School System **b)** THREE courses
Part III	PROFESSIONAL PRACTICE	TEN weeks
Part IV	ADDITIONAL RELATED COURSES	ONE course

Any deviation from this program will be granted to a student only after approval of his petition to the Council of the Faculty. The last date for changing optional subjects or courses will be September 30, 1974; thereafter changes may be made only with the approval of the Council. Consideration will be given in the following instances:

1 the substitution of a third teaching subject for the course from Part IV,

2 the substitution of a fourth optional course from Part II for the course from Part IV,

3 The substitution of a second course from Part IV for one of the three optional courses from Part II. If a candidate is given permission to take two Additional Related Courses, the two may not be under the auspices of the same Faculty department.

Part I
ching Subjects

A candidate will select two teaching subjects from those listed below, for which the prerequisite is at least 2 university courses (6 credits) unless otherwise specified:

Art Education 300 (6 credits or background)
Business Education 305 (no prerequisites)
Computer Studies 345 (acceptance into either the Mathematics or Science Department)
Counsellor Education 355 (15 credits in psychology, sociology, economics or related fields, at least 6 of which must be in psychology)
Dramatic Arts 485 or 480 (no prerequisites)
Economics 360 (9 credits)
Elementary Education 365 (no prerequisites)
English 375
French 380
Geography 385
Geology 390 (9 credits)
German 395
Greek 400
History 405
History (Special Course) 406 (no prerequisites; in lieu of an Additional Related Course and open to students taking *two* of Psychology and Sociology, Economics, Political Science, and another teaching subject other than History 405)
Home Economics 410 (15 approved credits)
Industrial Arts 415 (no prerequisites)
Industrial Arts 510 (no prerequisites; in lieu of an Additional Related Course and taken in conjunction with *Industrial Arts* 415 as a third teaching subject)
Italian 420
Latin 425
Mathematics 430
Music, Vocal 435 (6 credits or background)
Music, Instrumental 436 (6 credits or background) (may be taken only in conjunction with Vocal Music 435)
Physical and Health Education–Women 440 (no prerequisites)
Physical and Health Education–Men 445 (no prerequisites)
Political Science 450 (9 credits)
Psychology and Sociology 455 (9 credits)
Russian 460
School Librarianship 465 (no prerequisites)
School Librarianship 466 (accredited degree in Library Science)
Science 470
Spanish 475

NOTES:

Type A Candidates

When selecting his subjects in the Type B program, a candidate for the

High School Assistant's Certificate, Type A, must include the subject or subjects of the Type A certificate.

Languages
German, Greek, Italian, Russian, and Spanish may be selected only by a candidate for the High School Assistant's Certificate, Type A, in these subjects, except by permission of the Council of the Faculty.
A candidate should not choose a modern language unless he has oral proficiency in the language and a thorough knowledge of its grammar. He should be fully aware that the major portion of the lecturing is in the language concerned, and that he is expected to use that language in his teaching practice.

Part II
ducational Theory

a All candidates will take the course *Structural and Legal Bases of the Ontario School System* 201
b In addition, a candidate will take six hours of lectures per week in Educational Theory courses offered by the departments of Administration and Program Development, Educational Psychology, and History, Philosophy and Sociology of Education. No more than four hours may be taken with any one department.

Administration and Program Development
Program Development 202
The Individual Student and the School Program 204
Administration in the Modern School 205
Evaluation of Student Performance 206
Individual Research Project 207
Administration within the School System 208

Educational Psychology
Psychology Applied to Education 230
The Adolescent – at Home, in School and in the Community 231
The Child – at Home, in School and in the Community 232
Teaching – an Interpersonal Process 233
Psychological and Performance Evaluation of Student Performance 234
Individual Research Project 237

History, Philosophy and Sociology of Education
Comparative Education 260
Experience and Education 261
Modern Philosophy and Education 262
Progressive Education in Theory and Practice 263
School and Society 264
Sociology of Education 265
Values in Education 266
Individual Research Project 267
Authority and Freedom in School 268
Issues in the History of Canadian Education 269

Cross-Cultural Education 270
Modern Philosophies and Education–Advanced Level 271
History of Educational Thought in Western Culture 272

Technical and Industrial Arts (designed for Technical students)
Educational Psychology as it applies to Technical Education 706
History and Philosophy of Technical Education 708

Part III Professional Practice

A candidate will be assigned for ten weeks to schools approved for observation and practice teaching in his elected teaching subjects. Practice teaching is conducted under the joint tutelage of appointed associate teachers and the teaching subject departments. A candidate absent from scheduled practice teaching assignments may be required to make up the deficiency at the end of the session.

Part IV Additional ated Courses

These courses offer a candidate the opportunity to concentrate further on one of his teaching subjects or to pursue an interest in another teaching subject or in the field of general education.

Art Education
Design Education 114
Art and the Humanities 138
Art Studio 146
Canadian Art and Architecture 162 (not offered in 1974-75)

Business Education
An Analytical Study of Promotional Techniques 152 (not offered in 1974–75)
Research and Developmental Program in Business Education 153 (not offered in 1974–75)

Computer Studies
Computers in Education 106
Educational Tests and Measurements 124 (not offered in 1974–75)

Counsellor Education
The Contemporary School Counsellor 150

Dramatic Arts
Drama in Elementary Education 147

Educational Media
Educational Media 107
Speech and Personal Communication 143

Educational Psychology
Preparing Effective Instruction 116
Psychology of Communications 117 (not offered in 1974–75)
Socialization and Identity 154

English
The Language Arts of the Cinema 122
Developmental Reading 127
English for the Slower Learner 141 (not offered in 1974–75)
Psycholinguistics 142

Geography
Curriculum Theory and Design 104
Game Theory and Simulation in Relation to Learning 110
Geography and History Programs in Elementary Education – Grades and 8 161

History
Geography and History Programs in Elementary Education – Grades and 8 161

History, Philosophy and Sociology of Education
Problems in Canadian Education 136

Home Economics
Home Economics in the Elementary School 144

Institute of Child Study
Principles and Practices of Child Study 001

Mathematics Education
Individual Research Project in Mathematics Education 155
Mathematics Education in Elementary Education 156 (not offere in 1974–75)
Mathematics 157
Recreational Mathematics 158 (not offered in 1974–75)

Modern and Classical Languages
Applied Linguistics 102
Culture and Society in German Language Teaching 103
Electronic Aids to Language Learning 108
French at the Elementary School Level 121
Culture and Society as They Relate to the Teaching of French 129
Individualization in Modern Language Programs 160 (not offered 1974–75)

Music
Music for Elementary Schools – Grades 7 and 8 131
Sound Arts 137

Physical and Health Education
Current Health Problems in North American Society 105
Outdoor Education 115
Physical and Health Education for Elementary Schools 132

Affective Learning through Physical Education 151 (not offered in 1974–75)

School Librarianship
The School Library and the Subject Teacher 149

Science Education
Environmental Studies 109
Science Programs in Elementary Education 140

Technical and Industrial Arts
Vocational, Occupational and Industrial Arts Education in Secondary Schools 113
Special Topics in Creativity 123
Art and Crafts for Elementary Schools – Grades 7 and 8 130
English: Rhetoric and Semantics 139

Conditions for Final Standing

The standing of candidates will be determined by the combined results of term work and the final examinations in the subjects of Parts I, II, and IV, and by the record of Observation and Practice Teaching in Part III. Standing will be issued as follows: A–Superior Attainment; B–Above Average Attainment; C–Average Attainment; D–Below Average Attainment; F–Failure.

A student who obtains D standing or better in each of the courses in Parts I, II, and IV, and in each of the subjects taught in Part III, may be recommended by the Council of the Faculty for the Bachelor of Education degree and for the High School Assistant's Certificate, Type B.

A student who passes in Part III and fails in not more than two of the courses included in Parts I, II, and IV, of which only one may be a teaching subject listed in Part I, may be granted an F(s) standing, which means that he must take a supplemental examination in the course(s) failed, or otherwise meet the requirements of the department(s) concerned.

A candidate who fails in Part III of the program will not be recommended for a Bachelor of Education degree or a High School Assistant's Certificate. Such a candidate may apply for re-admission.

A candidate who fails or withdraws from attendance in any program listed in this calendar may re-attend in a subsequent year, with the approval of the Council of the Faculty.

Supplemental Privileges

A candidate for any certificate listed in this calendar, who failed at an examination under former regulations and was exempted from subsequent attendance at the Faculty of Education will take the final examination papers as prescribed herein, but his standing will be determined in the subjects as constituted under the regulations when he first wrote.

A candidate granted supplemental privileges may qualify in one or more of the following ways, as authorized by the Council of the Faculty:

H.S.A., Type B and A

1 by taking an examination or examinations in August at the conclusion of a summer session;

2 by otherwise satisfying the requirements of the department(s) concerned;

3 by attending the Summer Program for Teachers with Professional Education, taking only the subject(s) failed and writing the examination(s) at the conclusion of the course (Type B); or by successfully completing the Type A Summer Seminar.

In all instances, application must be made not later than June 21.

Type A Practical Tests

Type A candidates exempted from attendance will take their supplemental practical tests through the Faculty. Application for teaching and practical tests must be made by December 31.

Elementary Education

. Elementary ool Teacher's Certificate

A candidate in the Bachelor of Education program who wishes to qualify for the Elementary School Teacher's Certificate, Standard Four, in addition to the High School Assistant's Certificate, Type B, may select *Elementary Education* 365 as one of his two teaching subjects.

University courses in psychology, sociology or child study, together with languages, science or the arts, are considered most valuable as a background for teachers in the elementary school.

Elementary Education

365 *Elementary Education* (10 hours). Art, language arts, mathematics, music, physical education, science, social studies, and general methods and classroom management in the elementary school.

As one of his Educational Theory courses, a candidate in *Elementary Education* should select *The Child – at Home, in School and in the Community* 232.

A minimum of four weeks in elementary schools for candidates in this program will be included within the practice teaching period required of all candidates for the Bachelor of Education degree.

One-Year Program for the High School Assistant's Certificate, Type A

25. Type A

Candidates entering this program must hold an approved degree afte a four-year university course following Ontario Grade 13, or equival ent, with at least second class standing.

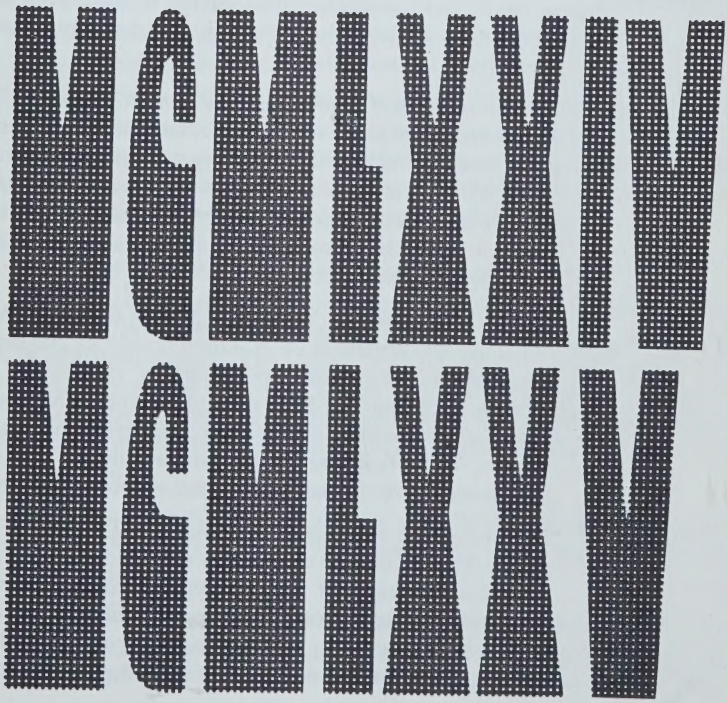
The High School Assistant's Certificate, Type A, qualifies the holde for five years as an assistant teacher of academic and general subject in the secondary schools of Ontario. It may become a Permanent Hig School Specialist's Certificate upon the completion of two years' suc cessful teaching experience in Ontario.
The Permanent High School Specialist's Certificate qualifies the holde to become head of a department in a secondary school.

26. Conditions of Admission

1 A candidate for a High School Assistant's Certificate, Type A, shal comply with the academic requirements prescribed in the Ministry o Education Memorandum 1970–71: 51.
2 An applicant for admission to the program for the High Schoo Assistant's Certificate, Type A, shall be an applicant for admission t the program for the High School Assistant's Certificate, Type B.

27. Recommendation of Type A Certificates

Subject to the condition that no candidate may be awarded a Hig School Assistant's Certificate, Type A, who does not already hold or i not also awarded a High School Assistant's Certificate, Type B, th final standing of a candidate in the High School Assistants' Type program will be decided by (a) the combined results of the term wor and the final examination in the department or subject concerned, an (b) by the practical work in Type A seminars as well as practic teaching experience as recommended by the department(s) concerned In order to pass, a candidate must obtain B standing in the final exam nations (including sessional records) and a rating of B in Practic Teaching for each Type A subject.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Details of Courses in Programs leading to the Bachelor of Education Degree and to the High School Assistant's Certificate and Additional Certificates

In each case, the numeral in brackets indicates the number of lecture hours per week.

28. Required Course

All students proceeding to the Bachelor of Education degree and to the High School Assistant's Certificate, Type B, will be required to take 201 *The Structural and Legal Bases of the Ontario School System* (1 hour). The organization of provincial and local systems of education; powers and duties of the various educational authorities; the Education Acts and Regulations of the Province of Ontario; professional aspects of teaching.

29. Administration and Program Development

Courses offered in Part II, Educational Theory

202 *Program Development* (2 hours). An examination of current theory and practice in curriculum design from Kindergarten to Grade 13. The relationship of curriculum to teaching and school organization at both elementary and secondary levels.

204 *The Individual Student and the School Program* (2 hours). School programs and practices which meet individual differences among students in elementary and secondary schools. A general study will be made of innovative teaching and organizational patterns, including particularly the non-graded, open-area and experimental schools, credit organization, house plans, team teaching, independent study and other related topics.

205 *Administration in the Modern School* (2 hours). A practical study of the use and organization of school resources and services in providing effective educational programs in elementary and secondary schools. Emphasis will be placed on the role of the teacher in phases of school operation such as discipline, staff relationships, organization of classes, individualizing instruction, evaluation procedures, and the design and implementation of overall school programs.

206 *Evaluation of Student Performance* (2 hours). A study of current evaluation practices in elementary and secondary schools. The course will develop some of the theoretical issues underlying evaluation methods, the design and marking of a wide variety of testing instruments, including essay, objective, oral, project, and self-assessment techniques. The fair assessment of individuals, comprehensive evalua

tion systems for schools or departments, distinctions between subjects, home reporting, concepts of promotion and failure, and grading systems will also be considered. Students do not require background in mathematics for this course.

207 *Individual Research Project* (2 hours). A student with specialized training and background who wishes to engage in an individual research project must obtain the approval of the Department before electing this course. He must submit a brief proposal acceptable to the Department and also show evidence of research skills and training appropriate to the area of study.

208 *Administration within the School System* (2 hours). A review of planning and administrative procedures in large systems of education. Particular emphasis will be given to the organization of learning resources, student services, and parent-teacher-student relationships. The interaction of trustees, senior officials, resource personnel, and school administrators will be considered. The effectiveness of large systems in formulating and in achieving desirable educational programs for the individual student and for society as a whole will provide a constant focus for study.

30. Art Education

300 *Art Education* (8 hours). Three major areas of study: history, philosophy and current practice of Art Education (2 hours); instruction and practice in two- and three-dimensional design in various media, with emphasis on classroom methods and the teacher's own artistic development (4 hours); history of the visual arts, chiefly in Canada, with emphasis on use of local resources as the basis of study in secondary schools (2 hours).

0100 *Seminar in Art Education* (4 hours). For Type A candidates in Art. The development of curricula for senior classes; facilities and administrative arrangements for art education; advanced experiments with art media; examination of aesthetic theories; historical research; the leadership role of the specialist teacher and department head.

Courses offered in Part IV, Additional Related Courses

114 *Design Education* (2 credit hours). A lecture-studio course which examines problems presented to the artist by the machine production of industrial society. The impact of technological developments upon environment; the solutions which have been formulated; tentative explorations of problems presented by recent developments. This course is offered in conjunction with the Technical and Industrial Arts Department.

138 *Art and the Humanities* (2 hours). A lecture-seminar course examining the relationships between art, literature and music in Western civilization.

146 *Art Studio* (2 credit hours). Instruction and practice in various art media, for the teacher's own artistic development as well as classroom application. May not be taken in combination with *Art Education* 300.

162 *Canadian Art and Architecture*. Offered only in the Woodsworth College degree program.

NOTE: On successful completion of *Art Education* 300, a candidate may be recommended for Part I of the Intermediate Certificate in Art. A candidate who fails to be recommended for this certificate may make up the deficiency through attendance at the Ministry of Education summer or winter courses.

31. Business Education Intermediate Certificates

A candidate must take Parts I and II in the one-year program to qualify for the Intermediate Certificate.

A previous course in business education or business experience is not required of a candidate for the Intermediate Certificate in Accountancy, Data Processing, Marketing, or Secretarial. A candidate without sufficient background or skills may be required to attend an evening course in one or more of the subjects in Part I.

Specialist Certificates

There is no Type A program in Business Education subjects, but a program leading to a Specialist Certificate is provided, with the academic requirements as follows:

1 *Accountancy Specialist Certificate*

Admission to the program leading to the Accountancy Specialist Certificate will be granted to students who hold the degree of Bachelor of Commerce from an Ontario university, or an equivalent degree from another province or country, with a standing of at least 60% or C, whichever is higher, and who are otherwise qualified to enter the High School Assistants' Program, Type B. The student will later be required to try a supplemental examination in any of the required subjects in which he has obtained less than 70% or B standing, whichever is higher. The required subjects are the university equivalents of: Introductory Accounting, Accounting I, Accounting II, Law, and Economic Principles.

2 *Data Processing Specialist Certificate*

Admission to the program leading to the Data Processing Specialist Certificate in Business Education subjects will be granted to students who hold a Bachelor of Arts or equivalent degree with a standing of 60% or C, whichever is higher, and who have taken university courses in the required subjects or who can qualify by tests on these subjects. The required subjects are: Introductory Accounting, Computer Concepts, Introduction to Problem Solving, Business Data Systems, Advanced Problem Solving and Management Information Systems.

3 *Marketing Specialist Certificate*

Admission to the program leading to the Marketing Specialist Certificate in Business Education subjects will be granted to student

who hold the degree of Bachelor of Business Administration from an Ontario university or an equivalent degree with a standing of at least 60% or C, whichever is higher, and who are otherwise qualified to enter the High School Assistants' Program, Type B. The student will be required to try a supplemental examination in any of the required subjects in which he has obtained less than 70% or B standing, whichever is higher. The required subjects are: Introductory Accounting, Introductory Marketing, Business Organization and Management, Economics, Marketing Principles and one additional Marketing course.

4 *Secretarial Specialist Certificate*
Admission to the program leading to the Secretarial Specialist certificate will be granted to students who hold the degree of Bachelor of Arts in Secretarial Science from an Ontario university or an equivalent degree with a standing of at least 60% or C, whichever is higher, and who are otherwise qualified to enter the High School Assistants' Program, Type B. The student will be required to try a supplemental in any of the required subjects in which he has obtained less than 70% or B standing, whichever is higher. The required subjects are the university equivalents of Typewriting, Introductory Stenography, Applied Stenography, Office Practice, Office Procedures, Economic Principles, and Secretarial Science I and II.

urses for the ntermediate Certificate

305 *Business Education*

1 Accountancy Program
Intermediate Part I
Introductory Accounting 309
Typewriting 307
Intermediate Part II
Business Teaching 316
Applications of Accounting 317

2 Data Processing Program
Intermediate Part I
Introductory Accounting 309
Typewriting 307
Intermediate Part II
(See Computer Studies, Section 32)

3 Marketing Program
Intermediate Part I
Introductory Accounting 309
Introductory Marketing 314
Intermediate Part II
Business Teaching 316
Related Marketing Concepts 326

4 Secretarial Program
Intermediate Part I
Typewriting 307
Introductory Stenography 312
Intermediate Part II
Business Teaching 316
Office Procedures 324

rses for the Specialist Certificate

1 *Accountancy Specialist*
Accounting 337

2 *Data Processing Specialist*
(See Computer Studies Section 32)

3 *Marketing Specialist*
Marketing 339

4 *Secretarial Specialist*
Secretarial Science 338

Description of Business Education Courses

307 *Typewriting* (3 hours). The development of a basic facility in typewriting, the application of this facility and the problems of teaching the junior grades in the secondary school.

309 *Introductory Accounting* (3 hours). To acquaint students with general accounting fundamentals including general bookkeeping practices and basic accounting concepts, and the teaching of this in the secondary school.

312 *Introductory Stenography* (3 hours). A course in the theory and application of Pitman Shorthand including consideration of the theoretical aspects of high speed writing and the teaching methods, approaches, and practices currently in use in the schools. The course includes the investigation and practices of advanced teaching techniques.

314 *Introductory Marketing* (3 hours). A course surveying the total distribution process with particular emphasis on the Canadian retail organization. The study will be consumer oriented.

316 *Business Teaching* (1 hour). A course in the fundamental philosophies pertaining to the instruction of Business Education subjects; specialized applications to the individual subject areas; the correlation of all business subjects.

317 *Applications of Accounting* (3 hours). The development of a basic facility in the use of business machines and a knowledge of the organization, law, financing and computerization of a business.

324 *Office Procedures* (3 hours). A practical course in the teaching of stenographic techniques including the practices and procedures followed in the modern office.

326 *Related Marketing Concepts* (3 hours). A survey of the peripheral aspects of marketing, both from a content and methodological viewpoint; the functional aspects of business and a study of distributive processes; the practical implications of marketing mathematics as related to business machine applications.

337 *Accounting* (1 hour). Accounting for partnerships, corporations, departments and manufacturing and the methods of presenting these topics.

338 *Secretarial Science* (1 hour). A course in advanced stenographic and secretarial practices; the organization and preparation of modern office practices and procedures including current and advanced teaching techniques and procedures.

339 *Marketing* (1 hour). The principles of teaching marketing subject as they apply to the upper grades of the Business Education course practical applications and their relevance to the individual in our consumer-oriented society.

152 *An Analytical Study of Promotional Techniques* (2 hours). Not offered in 1974–75.

153 *Research and Developmental Program in Business Education* (2 hours). Not offered in 1974–75.

2. Computer Studies

345 *Computer Studies*

Required:
Computer Concepts 346
Introduction to Problem Solving 347
Computer Studies Principles and Practices 348

For Business Education candidates wishing to obtain a Data Processing Specialist Certificate, the following additional courses are required:
Advanced Problem Solving 349
Business Data Systems 351
Management Information Systems 352

For a candidate who has successfully completed university courses equivalent to 346 and 347, one of the following courses will be substituted:
Advanced Problem Solving 349
Computer Applications 353

346 *Computer Concepts* (3 hours, September–December).
Basic computer concepts, flowcharting techniques, computer terminology, equipment peripheral to the computer system and information flow through a computer system; emphasis on problem solving techniques using the computer.

347 *Introduction to Problem Solving* (3 hours, January–April).
A course using the computer as a problem solving tool; students introduced to a high level programming language, as a vehicle of communication, and problem solving through flowcharting, coding, testing and debugging. (Prerequisites: Computer Concepts or departmental consent)

348 *Computer Studies Principles and Practices* (3 hours).
The problematic approach to the teaching of computer concepts and computer programming; exploration of the "hands-on" versus "theory" and the "hypothetical computer" versus "actual hardware" approach. Topics to be discussed: transfer of learning from one computer to another; optimum class size; available teaching aids; motivation techniques; evaluation; course objectives. (Prerequisites: Computer Concepts or departmental consent)

349 *Advanced Problem Solving* (3 hours).
Opportunities provided for the students to use the computer to solve

more advanced problems. In addition to the basic documentation re quirements, the students will be required to design the necessary input/output documents, and prepare and update suitable data files (Prerequisites: Introduction to Problem Solving or departmental con sent)

351 *Business Data Systems* (3 hours).
Organization of a business, management control and the flow of infor mation through the business; emphasis placed on the flowcharting o some of the main business systems with suitable documentation, re cord layout and forms design; use of unit record equipment in a compu ter environment. (Prerequisites: Introduction to Problem Solving o departmental consent)

352 *Management Information Systems* (3 hours).
Students are expected to apply systems knowledge to the solving of a case study. They will be required to design, flowchart, program and document a complete system. Students will also be required to imple ment aspects of their recommendations. (Prerequisites: Business Data Systems or departmental consent)

353 *Computer Applications* (3 hours).
Students will be required to participate in directed research projects in education involving Computer Studies and their other teaching subject(s). (Prerequisites: Advanced Problem Solving or departmenta consent)

0600 *Seminar in Computer Studies* (4 hours).
For Type A candidates in Computer Science. A course designed to explore the principles and practices of teaching computing in the sec ondary schools. Topics to be discussed: the use of introductory lan guages, elements of problem design and problem solving, individua student differences, the use of the computer as an instructional tool and effect of computer studies on other classroom studies.

Courses offered in Part IV, Additional Related Courses

106 *Computers in Education* (2 hours). Designed primarily for candi dates who do not have previous experience or academic background i computing, this course deals with the use of the computer as an instruc tional and administrative aid in education. Areas to be studied include computer-assisted learning, test scoring and item analysis, curriculur design, educational research, and student accounting. Emphasis is o the use of the computer as a problem-solving tool for instruction an school administration. Access to the computer centre is available fo approved student projects.

124 *Educational Tests and Measurements*. Not offered in 1974–75.

33. Counsellor Education

Each applicant will be required to have an interview with a member o the Counsellor Education Department as part of the selection process.

355 *Counsellor Education* (6 hours). Counselling theory and practice; assembling educational and occupational information for student use; assessment procedures; group methods and processes; foundations of counselling.

Course offered in Part IV, Additional Related Courses

150 *The Contemporary School Counsellor* (2 hours). This course analyzes primarily the helping relationship involved in teaching. Additional topics include: philosophical and sociological foundations of guidance; the counsellor as a consultant; the counsellor's relationship to the community; ethical and legal responsibilities of the counsellor; current social problems and counsellor response; the counsellor and the changing world of work. May not be taken in combination with *Counsellor Education* 355.

NOTE:
On successful completion of *Counsellor Education* 355, a candidate may be recommended for Part I of the Specialist Certificate in Guidance.
A candidate who fails to achieve a passing standard may repeat the course in a subsequent summer session.

Winter Evening Courses
Dates: October 1974 to May 1975
Program: Parts I and IV of the Counsellor Education Programs as described in the Counsellor Education booklet *may* be offered to a limited number of candidates seeking the Specialist Certificate in Guidance.
Application forms must be completed and returned along with necessary documents not later than August 1, 1974, to the Principal, Winter Evening Courses in Counsellor Education, Faculty of Education.

ramatic Arts

Each applicant will be required to have a personal interview with a member of the Dramatic Arts Department as part of the selection process.

480 *Dramatic Arts, Introductory Course. Improvisation and Production* (4 hours). This beginning course in the teaching of Dramatic Arts concerns itself with improvisation as a means of personal development and as a learning technique. Possibilities for conceptual development and expanding the imagination are explored through exercises in sense awareness, movement, and play-making. Improvisational and scripted drama are covered, as well as theatre production. Candidates wishing to work toward the Specialist Certificate in Dramatic Arts will be required to complete successfully three subsequent summer sessions.

485 *Dramatic Arts, Drama and Communication Arts* (9 hours and, in addition, regular evening and weekend workshop sessions). Through group projects, frequently culminating in performance, this course

explores the philosophy and practice of drama in education; the purposes of curricular and extra-curricular drama; creative drama; direction; production; the imaginative concepts and structures of aural and visual media; mixed media presentations; and the planning of developmental programs. Candidates wishing to work toward the Specialist Certificate in Dramatic Arts will be required to complete successfully two subsequent summer sessions.

0700 *Seminar in Drama* (2 hours). For Type A candidates in Dramatic Arts. An individual research project concerning Drama in Education, selected by the candidate in consultation with the Dramatic Arts Department.

Course in Part IV, Additional Related Courses

147 *Drama in Elementary Education* (2 hours). A practical course in the use of drama for integrating teaching strategy and learning experience within the interdisciplinary environment of an elementary school. It will involve participation in sensory awareness, improvisation, movement, and play-making.

NOTE: On successful completion of *Dramatic Arts* 485, a candidate may be recommended for Part I of the Specialist Certificate in Dramatic Arts.
A candidate who fails to achieve a passing standard will normally be required to fulfill the requirements by attending a summer program selected by the Dramatic Arts Department.

35. Economics

360 *Economics* (5 hours). A series of lectures and seminars on the content of modern economics and its effective communication at the secondary school level. Emphasis will be on the refining of participants' understanding of the principles of economics and on the development of an issues-oriented program to make this subject matter accessible to secondary school students.

0900 *Economics* (5 hours). For Type A candidates. An intensive study of the principles and methodology of modern economics relevant to the development of practical secondary school programs in this discipline. A model learning program will be critically analyzed and portions of it presented for group evaluation on the basis of clarity, precision, and appeal. Preparation of an instructional plan for a major unit of one of the courses proposed in the current Ministry of Education Guidelines for economics.

36. Educational Media

Courses offered in Part IV, Additional Related Courses

107 *Educational Media* (2 hours). A study of the basic principles of communication; the use of the various media, such as film projectors, tape recorders and television, will be a major part of the course.

143 *Speech and Personal Communication* (2 hours). A course directly related to the needs of the teacher as speaker and listener in the

classroom. It stresses effective projection of the voice, speech development in the student, the influence of technology on speech communication.

7. Educational Psychology

Courses offered in Part II, Educational Theory

230 *Psychology Applied to Education* (2 hours). Designed to show relevance of general psychology to teaching. Provides an overview of the areas of psychology related to education and teaching; problems in human communication, role of feedback, non-verbal communication, mass media, television, radio. Modern theories of learning will be examined and compared; the relevance of learning theory to motivation, aptitudes and attitudes, learning discrimination and skills, the slow learner, development, maturation and special education, research in education, programmed learning and computer-assisted instruction.

231 *The Adolescent – at Home, in School and in the Community* (2 hours). An analysis of the educationally relevant aspects of physical, emotional, social and cognitive development of school-age youth.

232 *The Child – at Home, in School and in the Community* (2 hours). An analysis of the educationally relevant aspects of physical, emotional, social and cognitive development of the school-age child. A student taking *Elementary Education* 365 should select this course as one of his three Educational Theory courses.

233 *Teaching – an Interpersonal Process* (2 hours). The teacher as partner in an interpersonal learning process; increased awareness and insight about forces operating in groups; how one's own behaviour affects group productivity; application of theory to development of innovative plans for better classroom teaching using large and small groups.

234 *Psychological and Performance Evaluation of Student Progress* (2 hours). General principles of construction, analysis and administration of various methods of testing and evaluation.

237 *Individual Research Project* (2 hours). A student with specialized training and background who wishes to engage in an individual research project must obtain the approval of the Department before electing this course. He must submit a brief proposal acceptable to the Department and also show evidence of research skills and training appropriate to the area of study.

Courses offered in Part IV, Additional Related Courses

116 *Preparing Effective Instruction* (2 hours). The specification and analysis of instructional objectives in terms of Bloom's taxonomy; analysis of innovative systems; construction of pre-tests and criterion-referenced tests; instructional materials for mastery learning and alternative instruction.

117 *Psychology of Communications*. Not offered in 1974–75.

154 *Socialization and Identity* (2 hours). An examination of the various theories in social psychology contributing to an understanding of human social development; an exploration of the development of individuality and group identities along with the factors of social interaction influencing the development of personality. Emphasis will be placed on contributions to personal growth made by teachers and schools at elementary and secondary levels.

Elementary Education

365 *Elementary Education*. For details of the program, see Section 24.

38. English

375 *English* (4 hours)

LITERATURE:
Values inherent in the study of good literature; basic approaches; various methods of presenting such literary forms as the poem, the drama, the essay, the short story, and the novel; the choosing of suitable textbooks for pupils of different abilities and levels; planning courses of study; evaluating students' progress; oral and supplementary reading; problems related to the teaching of English literature.

COMPOSITION:
The basic aim in teaching composition; place and treatment of grammar, rhetoric, logic and word study in the teaching of composition; principles to be followed in arranging courses; studying models; assigning, planning, evaluating and correcting compositions; improving the pupil's oral English; conducting class discussions; problems related to the teaching of English composition.

MEDIA:
The basic aim in treating mass media; objectives; categories; procedures.

ELECTIVES:
Creative thinking; developmental reading; creative drama; screen education; group dynamics; creative writing; mass media; psycholinguistics; English as a second language; English in the nongraded school.

1100 *Seminar in English* (4 hours). For Type A candidates in English. Teaching and discussion of selected topics; the English specialist; the head of the department; new methods; sequential programming; thematic study; comparative techniques; enrichment; acceleration; the slow learner; educational television; the new grammar; works in translation; remedial and developmental reading; advanced and general courses; mass media; creative thinking; creative writing; professional development; the nongraded school; the future of English studies.

Courses offered in Part IV, Additional Related Courses

122 *The Language Arts of the Cinema* (2 credit hours). A course designed to study trends in contemporary cinema. Although the course

concentrates mainly on feature films of such directors as Hitchcock, Bergman, Varda, Antonioni, Fellini, Godard, Truffaut, Resnais, Losey, and Lester, it does not neglect the popular cinema nor does it omit experimental short films. The several arts of the director, script writer, actor, editor, lighting-cameraman, composer, and sound man are studied so that the students may have a full appreciation of the language arts amalgam that we experience in the cinema.

127 *Developmental Reading* (2 hours). A course designed to introduce students to the possibilities of developmental reading at the secondary school level. Basic principles underlying an instructional program will be discussed. Specific methods of determining reading achievement, selecting patterns of organization, and planning the instructional program, will be introduced. Of major emphasis will be the devising of practical developmental reading programs.

141 *English for the Slower Learner*. Not offered in 1974–75.

142 *Psycholinguistics* (2 hours). A course designed to explore the psychological, biological, and sociological parameters of language as a communication system. Some of the main areas of investigation are: language acquisition in children; psychological models of language learning; linguistic models of grammar; general semantics; non-verbal modes of communication; language games; language study programs in the school (history of grammar, dictionaries and writing systems, language history, etymology, morphology); language and thought; language as a sociological determinant. Special attention will be given to the construction of language units for classroom study.

9. Geography

385 *Geography* (5 hours). Listed below are a number of Geography course units designed to give a degree of flexibility in the preparation of geography teachers. These units have been designed to meet the demand for professionally trained people who are either

i graduate geographers (Type A candidates), or
ii other university graduates (Type B candidates)

and who will proceed to a career in education, either as a specialist teacher of geography, or as one who wishes to teach geography together with other subjects. Because the department uses a team approach, two or more members of staff may be concerned with each unit.
Obligatory final examination for all candidates in courses 385 and 1500 will be held at the end of the course in late April or early May. In assessing each candidate the Geography staff will utilize a number of reports, seminar papers, essays, units and exercises. Term work is an important factor and accounts for approximately 60% of the final grade.

Geography: Orientation. The scope of the role of the geography teacher; styles of learning and their relationship to the teaching of geography and learner characteristics.

Geography: Curriculum Planning. Recognition of a curriculum framework as a general context within which the strategies for achieving educational objectives in the classroom may be discussed; the identification and relationship of the components of curriculum in a variety of contexts, e.g. classroom and field, and at a variety of scales e.g. program, unit, lesson.

Geography: Instructional Techniques and Procedures. Recognition, analysis and construction of learning experiences in geography in order to understand how educational objectives are achieved; the study of various resource materials and their relationship to strategies, techniques, and objectives in geography; analysis of geographic approaches, e.g. regional, systematic, thematic.

Geography: Educational Measurement and Evaluation. A study of ways to evaluate the effectiveness of learning experiences.

Geography: Field Studies. Integration of the objectives and techniques of 'landscape' study.

1500 *Seminar in Geography Curriculum Design* (4 hours). For Type A candidates in Geography. Candidates will meet as a special class in a program concerned with the study of principles of curriculum design as models for the development of geography curricula which meet the various future conditions and variables in education.

Courses offered in Part IV, Additional Related Courses

104 *Curriculum Theory and Design* (2 hours). Inquiry into the theory and design of a curriculum and the examination of curriculum projects in the field of social studies and geography at the elementary and secondary school levels.

110 *Game Theory and Simulation in Relation to Learning* (2 hours). An introduction to game theory and simulation as an approach to learning in geography and social science.

161 *Geography and History Programs in Elementary Education - Grades 7 and 8* (2 hours). Of particular interest to candidates enrolled in *Elementary Education* 365, this course provides an in-depth study of the specialized nature of curriculum development, programs, and methodology as related to the teaching of geography and history at the intermediate levels of the elementary school.

40. Geology

390 *Geology* (4 hours). Value and objectives of a geology course in the Ontario secondary school curriculum: investigation and study of appropriate teaching methods; procedures and curriculum organization; use and value of maps, equipment, teaching aids, books and field exercises for secondary school geology.

1700 *Seminar in Geology* (4 hours). For Type A candidates in Geology. (These candidates are advised to select Geography or Science as their other teaching subject in the High School Assistants' Program, Type

B.) Teaching and discussion of the geology curriculum; development and analysis of some of the difficult topics by means of original research and subsequent reports; experimental treatment of the work; field exercises; use of texts, manuals, maps and teaching aids; measurement and evaluation; organization and timing of a course of study in geology and mineralogy; discussion of appropriate teaching methods and procedures.

41. History

405 *History* (5 hours). A series of lectures and seminars on the following with specific reference to classroom practice:
Survey of history curricula in the schools; principles of course organization; procedures in course organization; factors in the development of effective teaching.
The teacher's philosophy and objectives in teaching history.
A study of the various forms of methodology used in history classes; evaluation of resources; new approaches to history teaching.
The student of history; motivation; evaluation; dealing with individual differences.
Preparation of a unit of a course of study in history.

406 *History* (Special Course) (4 hours) (in lieu of an Additional Related Course and open to students taking *two* of Psychology and Sociology, Economics, Political Science, and another teaching subject other than *History* 405). A series of lectures and seminars on most of the topics listed under *History* 405, but in less depth and with greater emphasis on methodology.

2300 *History* (5 hours). For Type A candidates in History. A series of lectures and seminars with emphasis on the practical application of the following:
A study of the critical philosophy of history, emphasizing the methods of the historian and the problems of historical knowledge; a brief survey of the approaches of selected historians and philosophers to these problems.
Cognitive and affective objectives in teaching history; approaches to the teaching of history such as thematic, chronological, problems, inquiry, public issues, concepts and generalizations.
Various forms of methodology.
The planning and organizing of historical materials for presentation by various methods including the treatment of themes, trends and interpretation of material.
Analysis of student difficulties.
Evaluating the effectiveness of teaching and learning.
Preparation of a Teaching Program of a major unit of a course of study.

Course offered in Part IV, Additional Related Courses

161 *Geography and History Programs in Elementary Education – Grades 7 and 8* (2 hours). Of particular interest to candidates enrolled in *Elementary Education* 365, this course provides an in-depth study of

the specialized nature of curriculum development, programs, and methodology as related to the teaching of geography and history at the intermediate levels of the elementary school.

42. History, Philosophy and Sociology of Education

Courses offered in Part II, Educational Theory

260 *Comparative Education* (2 hours). The basis of this course is student reading, class presentations, and discussion. The particular countries and topics to be dealt with will depend upon student interest and experience. The initial class discussions will deal with concepts common to education whatever the basis (e.g. liberalism, socialism, communism, nationalism, religion, development, or international cooperation). Students will then proceed to examine topics such as the aims, structure, curriculum, role of teachers, alternative routes, and control of education in various countries and relate these to the social, economic and political systems and their underlying assumptions and ideologies. By comparing the educational patterns of several countries, including Canada, students can gain a deeper insight into education.

261 *Experience and Education* (2 hours). A course designed to explore the relationships between theory and practice by trying to develop theory from personal experience. Initially students will participate in seminars to discuss how their personal experiences relate to various theoretical positions. Then they will examine the current status of such things as interdisciplinary approaches to education, free schools, L.I.P. programs, and environmental studies. The final weeks of the course will involve a consideration and evaluation of the work undertaken and the method adopted.

262 *Modern Philosophy and Education* (2 hours). A course dealing with such key problems as human freedom, coercion in the classroom, the problem of absurdity, social philosophy and educational theory, approaches to student-centred education, and the influence of modern philosophy on aims and methodology in education. Selected modern philosophical works will be examined. Students are encouraged to consider conflicting viewpoints and develop their own positions.

263 *Progressive Education in Theory and Practice* (2 hours). An analysis and discussion of progressive theories and practices with special reference to the ideas of the Pragmatists, for the purpose, in the main, of inducing beginning teachers to search for meaning in such familiar learning concepts as interest, activity, discovery, assimilation, authority, freedom, natural growth, creativity, and continuous progress.

264 *School and Society* (2 hours). A course involving a consideration of such problems as socio-cultural influences on educational achievement, value conflicts (between generations and among socio-economic classes), and the conflicting functions of the school as an institution for transmitting the cultural heritage as well as criticizing it. An analysis of these problems will uncover such issues of current concern to schools

and teachers as the generation gap, educational control, student power.

265 *Sociology of Education* (2 hours). An examination of the school as an institution in the society which it serves. Topics will include the structure of society and education, education and social change, education and social mobility, the socialization of the child, the social role of the teacher, the influence of economic and political forces on education, education and the values of the community. Previous university work in sociology is desirable.

266 *Values in Education* (2 hours). An examination of selected topics in value theory seen within the educational context. Examples of possible topics: authority and freedom; perception and judgment in education and the arts; the aims of education; valuational impact of the mass media; the teacher and the new morality; expression, representation, and value formation; technology and the counter-culture; conceptual analysis of the educational environment. No formal background in philosophy is required.

267 *Individual Research Project* (2 hours). A student with specialized training and background who wishes to engage in an individual research project must obtain the approval of the Department before electing this course. He must submit a brief proposal acceptable to the Department and also show evidence of research skills and training appropriate to the area of study.

268 *Authority and Freedom in School* (2 hours). Can an ideal of individual freedom be supported? Can authority be justified? Does the ideal of individual freedom preclude the exercise of authority? Should the school enforce a prevailing moral code? Can a school be amoral? Is "compulsory education" a contradiction? Why bother being ethical? This course will attempt to get at the roots of human ethical valuing and thereby illumine, and confront one with, the moral dimension of the school.

269 *Issues in the History of Canadian Education* (2 hours). A course designed to give students a perspective of the main influences, problems, and changes in Canadian education. Some of the issues that may be examined are: the functions schooling has performed; the educational roles of institutions other than schools; family life and the concepts of childhood and adolescence; the alteration in the roles of the teacher and student; and the influence of social, economic and political factors on education. The particular aspects to be studied will be determined by the students in consultation with the instructor.

270 *Cross-Cultural Education* (2 hours). An examination of the educational issues, problems and processes encountered in a pluralistic society, from perspectives such as history, psychology, sociology, philosophy, and program development. It will focus upon education in relation to poverty, ethnic groups, the roles of women, and the counter-culture. Sample issues to be dealt with are: assimilation and

integration, the role of religion in education, value conflicts and discip-
line, mental health, prejudice and discrimination, curriculum design
open-structured and free schools, stereotypes and women's liberation.

271 *Modern Philosophies and Education – Advanced Level* (2 hours).
A strictly seminar course, which will explore the thinking of Camus
Sartre and Dewey. Only students who have at least two philosophy
courses to their credit, or who have the permission of the instructor
may enrol. Not open to students registered in *Modern Philosophy and
Education* 262.

272 *History of Educational Thought in Western Culture* (2 hours). A
critical examination of some of the major ideas that have influenced
educational thought and practice in Western culture, beginning with
Plato and Aristotle. Students will investigate various theories of learn-
ing, the concept of the ideal teacher, the history of educational institu-
tions, images of childhood, and modern mass education. Humanist and
religious perspectives as continuing themes in educating men and
women for their particular era will form the core of the study.

Course offered in Part IV, Additional Related Courses

136 *Problems in Canadian Education* (2 hours). A reading-discussion
course where students will select for individual study a particular
problem or theme in the history of Canadian education, for example
technical and vocational education, the kindergarten movement, pro-
gressive education, ethnic groups and assimilation, urbanization, rural
problems, the role of the state, or the changes that have taken place in
the aims and content of certain school subject areas such as health
education, physical education, history, literature, mathematics or the
sciences.

43. Home Economics

Admission to the course for the Intermediate Home Economics
Certificate is restricted to candidates who submit evidence of gradua-
tion with a standing not lower than 60% or C, whichever is higher, in the
final year of a university program having at least five approved courses
in Home Economics.

410 *Home Economics* (8 hours). For Intermediate and Type A candi-
dates. Development, present trends, values and aims of Home
Economics in Ontario schools with emphasis on the growth of personal
and professional philosophy.
New concepts of curriculum and teaching emphasizing flexibility,
cooperative planning, and recognition of individual differences are
explored through an individualized program offering a wide choice of
learning experiences.
Creation and function of objectives and evaluation procedures in the
learning-teaching process with implications for planning.

2500 *Seminar in Home Economics* (2 hours). For Type A candidates in
Home Economics. A study of Home Economics education as it relates
to the Canadian family, the individual and the environment, with

emphasis on readings in current literature and discussions. Students will become familiar with resource materials, with the work of outstanding leaders in the field and will develop a strong philosophy for potential leadership.

Course offered in Part IV, Additional Related Courses

144 *Home Economics in the Elementary School* (2 hours). An examination of the Home Economics program in the junior and intermediate grades of the elementary school, with emphasis on trends in curriculum, organization, philosophy and equipment. Students will meet experienced teachers in a seminar situation. Open only to candidates enrolled in *Home Economics* 410.

NOTE: On successful completion of *Home Economics* 410, a candidate may be recommended for the Intermediate Certificate in Home Economics.
A candidate who fails may complete her standing by passing a supplemental examination in August or by completing successfully the Home Economics course of the High School Assistants' Type B Summer Program for Teachers with Professional Education.

ndustrial Arts

415 *Industrial Arts I* (8 hours). Part I of the two-part sequence leading to the Elementary Certificate in Industrial Arts. The course consists of lectures and laboratory experience in material science, design technology, environmental design, fabrication and production. Problems are presented to develop creative abilities, experimentation, and the required hand and machine skills to work with a variety of materials and processes. Factors controlling the design and planning of objects in the man-made environments are studied and applied in practical work.

510 *Industrial Arts II* (8 hours). Part II of the two-part sequence leading to the Elementary Certificate in Industrial Arts. An extension of *Industrial Arts* 415, it provides more advanced experiences in material science, design technology, environmental design, and fabrication and production. Open only to candidates enrolled in *Industrial Arts* 415.

Courses offered in Part IV, Additional Related Courses

113 *Vocational, Occupational, and Industrial Arts Education in Secondary Schools* (2 hours). Types of certificates, the admission requirements, history, philosophy, and the means of realizing the aims of these three types of education.

114 *Design Education* (2 credit hours). (See section 30)

123 *Special Topics in Creativity* (2 hours). In-depth examination of the development of creativity through problem solving, with opportunities for application.

130 *Art and Crafts for Elementary Schools – Grades 7 and 8* (2 hours). Of particular interest to students in *Elementary Education* 365, this course provides an introduction to basic design, picture and print

making, and the creative use of materials in two and three dimensions. Different sections will emphasize whichever aspects of elementary ar education best meet the needs of the students involved.

139 *English: Rhetoric and Semantics* (2 hours).

RHETORIC:
Methods and patterns of clear and effective writing; relationship be tween thinking and the composition process; perceptive seeing; rhetor ical considerations in the composition of sentences, paragraphs, and essays; characteristics and techniques of effective identification definition, comparison and contrast, classification, and illustration three types of analysis: functional, process, and causal.

SEMANTICS:
Representative subjects of investigation: codes and levels of speech problems with definitions; relationship between abstraction, though and action; the uses of language – both verbal and non-verbal – in popular culture, advertising, mass media, news gathering, religion and prayer, science, and education.

NOTES:
A candidate may obtain the Elementary Certificate in Industrial Art by successfully completing
1 *Industrial Arts* 415 and 510, or
2 *Industrial Arts* 415 followed by a seven-week summer program.
A candidate in *Industrial Arts* 415 and/or 510 who fails in the written examination but passes in all the subjects of the practical tests may complete his standing by passing in the written examination at a subsequent date without further attendance. A candidate who passes in the written examinations but fails in one or more of the subjects of the practical tests may obtain his standing by completing successfully a subsequent summer course under conditions to be determined by the Council of the Faculty.

45. Institute of Child Study

Course offered in Part IV, Additional Related Courses

001 *Principles and Practices of Child Study* (2 hours). A consideration of general principles of physical, motor, cognitive, emotional, social and personality development and ways of identifying, implementing and evaluating those practices which support this development. Emphasis will be placed on examining methods and procedures used by parents and teachers in the socialization and education of children from infancy through adolescence. Consideration will be given to specific problem areas such as learning disabilities, speech defects, mental retardation, cultural and emotional deprivation, cultural conflict, delinquency, illness, psychosomatic disorders and emotional problems.

47. Mathematics Education

430 *Mathematics* (5 hours). A consideration of the place of mathematics in elementary and secondary education; objectives of the mathematics teacher.

Classroom procedures and teaching methods, Grade 1 through Grade 12, of a balanced student-centred teaching program including methods designed to obtain maximum student involvement in the discovery and development of mathematical concepts and techniques; individual, small group, and large group methods; team teaching involving curriculum planning and execution as a team effort; laboratory techniques; use of multimedia, audiovisual materials, calculators, models and other instructional materials; interdisciplinary approaches, environmental studies; use of the mathematics workshop to promote understanding and confidence, and develop powers of inquiry and creativity; seminar methods; use of socratic discussion; research; testing and evaluation.
The implications for the elementary and secondary schools of contemporary trends in mathematics education; history and development of mathematics; foundations of algebra and geometry; fundamental concepts of logic; applications of mathematics.

3100 *Seminar in Mathematics* (4 hours). For Type A candidates in Mathematics. A consideration of the development of curriculum for the elementary and secondary school mathematics programs from Kindergarten through Grade 13; the responsibilities of departmental administration and professional leadership.

Courses offered in Part IV, Additional Related Courses

155 *Individual Research Project in Mathematics Education* (2 hours). An in-depth study of a topic selected in consultation with the Mathematics Education staff. The study should involve a combination of seminars, laboratory work and field experience. Open only to students taking *Mathematics* 430.

156 *Mathematics in Elementary Education*. Not offered in 1974–75.

157 *Mathematics* (2 hours). An introduction to higher mathematics, including a study of some advanced secondary school topics, providing background and an opportunity for discussion pertinent to the teaching of secondary school mathematics. Open only to students having at least 12 credits in university mathematics.

158 *Recreational Mathematics*. Offered only in the Woodsworth College degree program.

48. Modern and Classical Languages: nch, German, lian, Russian, Spanish

Each applicant seeking admission to a course in modern languages is required to take a test or series of tests as one of the criteria for acceptance. These tests are designed to assess ability in the areas of comprehension (listening and reading) and expression (oral and written) in the language(s) concerned. They will be administered on announced dates preceding the applicant's final acceptance by the Faculty.

Modern Languages (5 hours per language). *French* 380, *German* 395, *Italian* 420, *Russian* 460, *Spanish* 475.

METHODOLOGY:
Current aims; specific objectives at secondary and primary level curricula; materials.
Procedures; specific techniques in audiolingual presentation; the written language; vocabulary acquisition; inductive approach to language generalizations; teaching literature.
Lesson planning (initial, series, review).
Tests and examinations, both oral and written; administration; marking.

APPLIED PHONOLOGY:
Description of the sounds; intonation; accent; discrimination and production on the part of the learner; standards of phonemic and phonetic accuracy (where pertinent); remedial drills; error detection by the teacher; counselling techniques and practice.

CONVERSATION:
Free and guided discussions; leadership practice.

LANGUAGE PRACTICE:
Current usage, emphasizing the spoken language; laboratory drills with pedagogical bias; testing program. (Additional laboratory time may be required of those in need of remedial work.)

(a) *Seminar in Modern Languages* (2 hours). For Type A candidates in *French* 1300, *German* 1900, *Italian* 2700, *Russian* 4700, *Spanish* 5300 whether chosen as a single Type A subject or combined with another Type A subject. Study in depth at all levels, as outlined in the Course of Study and Curricula issued by the Ministry of Education; stress on methods of presenting work at the Grade 13 level.

(b) *Seminar in Modern Languages* (2 additional hours). For Type A candidates in *French* 1300, *German* 1900, *Italian* 2700, *Russian* 4700 *Spanish* 5300, when *not* combined with another Type A subject. Selected topics, such as linguistics, learning theory and teaching practice, curriculum, culture, reference works, resource materials, textual research, preparation of teaching modules.

Courses offered in Part IV, Additional Related Courses

102 *Applied Linguistics* (2 credit hours). Study of different applications of linguistic theories to the teaching of French; special attention to problems of phonemics, morphology, syntax and semantics in connection with the data of structural linguistics. Open only to students enrolled in *French* 380.

103 *Culture and Society in German Language Teaching* (2 hours). Historical, social and regional factors in the teaching of modern German; a laboratory approach. Open only to students enrolled in *German* 395.

108 *Electronic Aids to Language Learning* (2 hours). Audio aids in-

cluding language laboratory; scripting and taping of programs; film and video production; equipment manipulation. This course (which presupposes an interest in, but no knowledge of, electronic aids) is open to any student enrolled in a modern language course.

121 *French at the Elementary School Level* (2 hours). French as a second language from the earliest grades of the elementary school; programs; procedures specific to the age level; audiovisual aids. This course leads to the Certificate as Teacher of French to English-speaking Pupils in Elementary Schools. Open only to students enrolled in both *French* 380 and *Elementary Education* 365.

129 *Culture and Society as They Relate to the Teaching of French* (2 hours). Historical, social and regional factors. A required part of the course is field work in the native milieu. Open only to students enrolled in *French* 380.

160 *Individualization in Modern Language Programs*. Not offered in 1974–75.

tin and Greek

425 *Latin and Classical Civilization,* 400 *Greek* (5 hours each language). An examination of the linguistic and paralinguistic elements involved in the teaching of Latin and/or Greek, including: oral reading of prose and poetry (all common metres); morphology; grammar and syntax; derivation; use of multi-media and audiovisual aids and interest devices; the direct approach, with stress on the Danish Nature Method, The Cambridge Latin Course, Programmed Learning; individual, small group and large group methods; curriculum development and presentation through the medium of team teaching, with emphasis on the sociological aspects of life in ancient Rome and Greece; testing and measurement.

Seminar in Classics, 2900 *Latin*, 2100 *Greek* (2 hours). An examination of techniques involved in curriculum planning and presentation appropriate for use in advanced classes of Latin, with emphasis on the suitability for use in secondary schools of the writings of many Roman authors, including Plautus, Caesar, Horace, Virgil, Cicero, Catullus, Tibullus, Propertius, Nepos, Suetonius, Seneca, Tacitus, Pliny, Martial, Juvenal, Petronius, Aulus Gellius, Lucretius, St. Augustine and other medieval selections; advanced grammar and syntax; testing and measurement.

49. Music

435 *Music, Vocal* (4 hours). A multi-faceted approach to music learning which involves the expansion of aural awareness and musical sensitivity through sound explorations, improvisation, manipulations of musical materials and procedures; listening, vocalizing, and conducting.

436 *Music, Instrumental* (6 hours). A practical course emphasizing the individual mastery of instruments and methods of class teaching. May be taken only in conjunction with *Vocal Music* 435.

3300 *Seminar in Music* (6 hours). For Type A candidates in Music.

Comparative studies of current aesthetics and practices; advance ensemble techniques; original compositions or arrangements for th ensemble; problems in the developing of aural responsiveness to varie musical expressions; examination of sound manipulations and forma procedures; multi-media presentations; studies in curriculum design.

Courses offered in Part IV, Additional Related Courses

131 *Music for Elementary Schools – Grades 7 and 8* (2 hours). A general approach to music learning at the intermediate level.

137 *Sound Arts* (2 hours). Sound exploration, improvisation, and lis tening predominate in this course, designed for students who have n background in music but are intrigued by the diverse sounds of th environment. The activities and materials in *Sound Arts* may be usefu as a basis for interdisciplinary study. Not open to candidates takin *Music* 435.

NOTE: On successful completion of *Vocal Music* 435 or *Vocal an Instrumental Music* 435/436, a candidate may be recommended fo Part I of the Intermediate Certificate in Vocal Music or in Vocal an Instrumental Music. A subsequent summer session must be taken t complete the requirements for the Intermediate Certificate.
A candidate who fails in not more than two subjects of the written an practical tests may complete his standing by passing in the subject concerned at a subsequent examination without further attendance but in the subjects of the practical tests such a candidate must pass test by arrangement approved by the Council of the Faculty. Any othe candidate who fails must attend a Ministry of Education summe course.

50. Physical and Health Education

440 *Physical and Health Education* (Women)
445 *Physical and Health Education* (Men)
Part I of the Program for the Intermediate Certificate (8 hours)
An introductory course in principles and practices of Physical an Health Education. Emphasis is placed on methods of teaching th physical activities and health materials outlined in the Courses of Stud for the Intermediate Division of the Ontario Ministry of Education.

Part II of the Program for the Intermediate Certificate (4 hours)
The prerequisite for Part II is a minimum of 6 university credits i Physical and Health Education. This course is a continuation of, an will be taken in addition to, Part I. It will be given only if a sufficien number of applications are received.

Program for the Specialist Certificate (8 hours)
Emphasis is placed on methodology, philosophic and scientific princi ples, and the organization and administration of all aspects of Physica and Health Education in the school situation. The prerequisite is minimum of 24 university credits in Physical and Health Educatio

(exclusive of methods courses). This program includes the work of the H.S.A. Type B course in Physical and Health Education.

The Specialist Certificate may be granted to a candidate who achieves the standard for Part I of the Intermediate Certificate and who obtains B standing in the Practice Teaching, the written examinations and the practical tests of the course.

Ontario Teachers' Aquatic Standard – A candidate who meets this standard may be awarded a certificate endorsed 'Credit O.T.A.S.' A candidate who is exempted by a medical certificate from a course in aquatics or a candidate who has failed to meet the aquatic standard may be awarded a certificate in Physical and Health Education endorsed 'without aquatics'.

3700 *Seminar in Physical and Health Education – Women* (8 hours).
3900 *Seminar in Physical and Health Education – Men* (8 hours).
For Type A candidates in Physical and Health Education.
The Seminar is concerned with: educational concepts relative to Physical and Health Education; scientific principles relative to human movement; organization and administration of all phases of the secondary school Physical and Health Education program; advanced methodology and teaching techniques. These seminars include the work of the H.S.A. Type B course in Physical and Health Education.

Courses offered in Part IV, Additional Related Courses

105 *Current Health Problems in North American Society* (2 hours). A survey course including lectures and seminars related to such health areas as cardiovascular disease, mental health, air and water pollution, consumer health, drugs, and human sexuality.

115 *Outdoor Education* (2 hours). An introductory course emphasizing the use of the outdoor environment as an educational medium. An interdisciplinary program which includes lectures and seminars and devotes a considerable amount of time to field work.

132 *Physical and Health Education for Elementary Schools* (2 hours). A critical examination of teaching procedures which relate specifically to the aims of Physical and Health Education; an activity course based on participation in and examination of games, gymnastics and dance appropriate for the healthy development of children. Special emphasis will be placed on Grades 7 and 8.

151 *Affective Learning through Physical Education*. Not offered in 1974–75.

51. Political Science

450 *Political Science* (5 hours). A program of lectures and seminars involving group work, presentations and films with specific reference to classroom practice. Political science as a discipline and its place in the secondary schools; the Government of Canada – machinery, process, performance and participation; principles of course construction

– group preparation and presentation of representative units selected from Ontario Ministry of Education Guideline: People and Politics current events in the classroom; examination of a variety of approaches to the teaching of Politics and Government; motivation and evaluation of students and teachers.

4300 *Political Science* (5 hours). A seminar-workshop course for Type A candidates combining the academic study of political science with practical experience in the pedagogy of the subject. Seminar discussions conducted by each member of the course centre around academic topics in the field of political science. Videotaped lessons by each candidate illustrating a variety of approaches provide a basis for critical analysis of effective methodology. One major research paper or project during the year.

52. Psychology and Sociology

455 *Psychology and Sociology* (5 hours). A series of seminars dealing with the curriculum of the secondary school course "Man in Society" various approaches to teaching "Man in Society"; special techniques and curricular innovation as applied to "Man in Society". Preparation of a unit of study.

4500 *Psychology* and 5100 *Sociology* (5 hours). A series of seminars for Type A candidates dealing with the curriculum of the secondary school course "Man in Society"; systems models of the classroom; the application of social science theories to instructional behaviour; innovation and the process of curriculum construction; the role of the social scientist in the school milieu. Preparation of one major paper during the year.

53. School Librarianship

465 *School Librarianship* (10 hours). An introductory course for potential school librarians. The following aspects of the school library will be explored: Collection, including curriculum, recreational and basic reference materials; Services; Administration: Organization of Materials. Seminars for discussion of materials and student presentations, laboratory periods for practice, and lectures constitute the format of the course.

466 *School Librarianship* (6 hours). For candidates who hold an accredited degree in library science. Emphasis will be placed on services given by the school library, the curriculum development function of the school library, and special research projects.

Course offered in Part IV, Additional Related Courses

149 *The School Library and the Subject Teacher* (2 hours). The interrelationship between the subject teacher and the school library; how the use of resources and services provided by the library can contribute to more effective learning. May not be taken in combination with *School Librarianship* 465 or 466.

NOTE: *School Librarianship* 465 is Part I of a two-part program leading

to the Intermediate Certificate in School Librarianship. To complete the requirements for the Intermediate Certificate, a summer session subsequent to one year of successful experience in a school library is required.

A candidate who fails to obtain a passing standing in the term work and written examinations in all subjects will normally be required to repeat the course for standing in a subsequent summer session. However, a candidate who fails only in Organization of Materials may be allowed to complete his standing by passing a written examination in this subject at a subsequent date without further attendance, or may be required to repeat this subject in a subsequent summer session, whichever is decided by the School Librarianship Department.

54. Science Education

470 *Science* (4 hours). The role of science in elementary and secondary education; the aims and objectives of science education; science curriculum design; unit planning and lesson planning; a study of representative portions of contemporary science courses; an examination of the various approaches to the teaching of science; procedure and methods used to obtain maximum student interest and participation; recognition of individual student differences; the use of audiovisual aids in science teaching; source materials; the purchase, maintenance and use of equipment; testing and evaluation.

0300 *Biology* (6 hours)–For Type A candidates in Biology.

0500 *Chemistry* (6 hours)–For Type A candidates in Chemistry.

4100 *Physics* (6 hours)–For Type A candidates in Physics.

Courses 0300, 0500, and 4100 consist of a series of lectures, seminars and laboratory workshops which emphasize the methodology and content of the Intermediate and Senior Divisions in the various branches of Science. The content of *Science* 470 will also be covered with reference to the specialist teacher in each subject area.

Courses offered in Part IV, Additional Related Courses

109 *Environmental Studies* (2 hours). From the areas of freshwater ecology, terrestrial ecology, soil ecology, environmental pollution, and urban studies, material is selected that can be used to supplement existing programs in schools or to build an interdisciplinary course in Environmental Studies. This course has a science base. Field experience is provided.

140 *Science Programs in Elementary Education* (2 hours). A course of particular interest to Type A candidates in Biology, Chemistry, or Physics. A study of the science programs currently used in elementary schools; teaching techniques and procedures specific to age level; correlation of science in the senior elementary grades and the junior secondary grades.

Bachelor of Education Degree Program (Woodsworth College)

55. Bachelor of Education Degree Program by Extension

Woodsworth College (Division of Extension), University of Toronto offers to holders of Ontario permanent basic teaching certificates a program leading to the Bachelor of Education degree. This will consis of four courses in the current one-year Bachelor of Education degree program, drawn from the offerings under Part II, Educational Theory and Part IV, Additional Related Courses, as listed in the Woodsworth College calendar.

Graduates of the one-year program of The College of Education prior to May, 1970, who hold a Permanent High School Assistant's Certificate, may qualify for the Bachelor of Education degree by taking two of the courses noted above, of which one must be taken not later than the summer of 1974.

Admission Requirements:

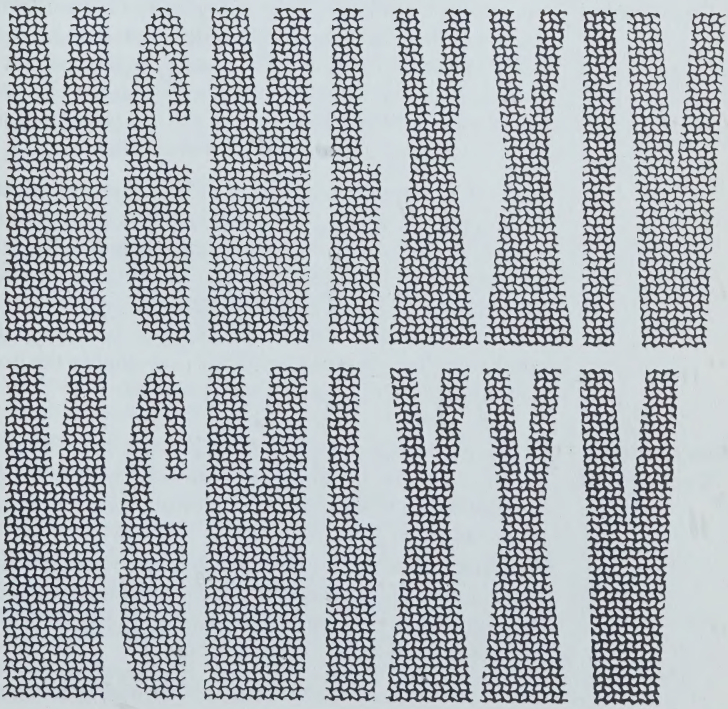
a an approved degree from an accredited university (See Section 18),
b a permanent basic Ontario teaching certificate.

General Information:

1 The summer day sessions are of six weeks' duration.
2 The course in each subject will be thirty class hours.
3 A candidate may take one or two courses in each of the Fall, Spring and Summer terms.
4 It may be necessary to limit enrolment in certain courses.
5 A course will not be offered unless sufficient candidates apply.

Inquiry and Application:

Co-ordinator of Part-Time Study Degree Program, Faculty of Education, 371 Bloor Street West, Toronto M5S 2R7. (928-5261)



One-Year Programs in Technical and Industrial Arts Education
(A) Vocational or Occupational Certificates and Bachelor of Education Degree

56. Bachelor of Education Degree and the Vocational Certificate, Type B, or Occupational Certificate, Type B (Practical Subjects)

The degree of Bachelor of Education will be awarded to a student who holds an approved degree from a recognized university, and who successfully completes the one-year program leading to the Vocational Certificate, Type B, or the Occupational Certificate, Type B (Practical Subjects), awarded by the Ontario Ministry of Education. (See also Section 17.)

Other candidates with suitable academic standing and wage-earning experience who meet the admission requirements peculiar to their subject areas may enter a one-year program leading to a Vocational Certificate, Type B, or an Occupational Certificate, Type B (Practical Subjects).

57. Vocational Certificates

Vocational Certificate, Type B. The basic certificate is the Interim Vocational Certificate, Type B. It qualifies the holder for five years as a teacher in the Vocational subject designated on his certificate.

A Permanent Vocational Certificate in the subject named may be requested of the Ministry of Education upon the completion of two years' successful teaching experience in a secondary school in Ontario in the subject area designated on his certificate.

Vocational Certificate, Type A. The higher certificate is the Interim Vocational Certificate, Type A. It qualifies the holder for five years as a teacher in the Vocational subject designated on his certificate.

A Permanent Vocational Specialist's Certificate may be requested of the Ministry of Education upon completion of two years' successful experience in a secondary school in Ontario in the subject designated on the certificate. The Type A Certificate may qualify the holder to become a Technical Director in a secondary school.

58. Occupational Certificates

Occupational Certificate, Type B (Practical Subjects). The basic certificate is the Interim Occupational Certificate, Type B (Practical Subjects). It qualifies the holder for five years as a teacher in Occupational subjects.

A Permanent Occupational Certificate (Practical Subjects) may be requested of the Ministry of Education upon completion of two years successful experience in a secondary school in Ontario teaching occupational subjects.

Occupational Certificate, Type A. The higher certificate is the Interim

Occupational Certificate, Type A. It qualifies the holder for five years as a teacher in occupational subjects.
A Permanent Occupational Specialist's Certificate may be requested of the Ministry of Education upon the completion of two years' successful teaching experience in Ontario. The Type A Certificate may qualify the holder to become a Director of an Occupational Department.

59. General Conditions of Admission

An applicant for admission to the one-year program leading to certificates in Vocational, Occupational, or Industrial Arts must make application, not later than August 16, to the Director of the Department of Technical and Industrial Arts, on a form to be obtained from him, and shall submit with the application:

1 *A birth certificate.* If not born in Canada, the applicant must submit a certificate from a competent authority that he is a Canadian citizen or has Landed Immigrant status. For the Vocational Program, male applicants shall be at least 23 years of age; female applicants shall be at least 21 years of age.

2 Evidence of a negative tuberculin test reading or chest x-ray taken within the year preceding September 16, 1974.

Vocational or Occupational Certificate, Type B

To this program may be admitted holders of an approved degree in engineering, architecture, nursing or science from a recognized university; graduates of polytechnical institutes or colleges of applied arts and technology; and skilled tradesmen.

Engineers
An applicant must hold a four-year degree from the faculty of applied science of a recognized university, and must submit statements to prove not less than two years' subsequent experience in the field of his major subject.

Technologists and Technicians
An applicant must hold a three-year diploma from an approved program offered by a polytechnical institute or college of applied arts and technology, which requires Ontario Grade 12 standing as one of the conditions for admission. He must also document three years of acceptable work experience.

Skilled Tradesmen
An applicant is required to give evidence of a minimum of a secondary school graduation diploma, or equivalent; approved trade training; and experience (generally seven years).
The training or apprenticeship required is the same as for journeyman's qualifications in the trade concerned. Special training obtained in an approved day vocational school will be taken into account. An applicant shall submit statements from the persons or firms under whom he was trained, showing the length of the training period and the nature of the work. The trade experience required shall be several years as a wage-earning journeyman with reputable firms, and shall be such as to show that the applicant is a skilled craftsman, competent in the main

branches of the trade concerned, and familiar with its recent develop ment. The length of the journeyman experience depends upon th nature of the trade. Documentary evidence of experience in the trade i approved shops shall be furnished by the applicant.

An applicant for admission to the program leading to the Occupationa Certificate, Type B (Practical Subjects), shall furnish proof of wage earning experience over at least seven years and involving at least thre trade areas.

In calculating the total years of wage-earning experience and/or train ing, only those years subsequent to the date of the highest academi attainment used in the calculation can be credited unless the academi program of the candidate was interrupted for a number of years durin which he was engaged in such wage-earning activity.

NOTE:

1 In all cases the name of the degree, diploma, or apprenticeship mus correspond with both the nature of the wage-earning experience and th subject to be taught.

2 A minimum of two years of Canadian wage-earning experience i required.

3 Successful completion of the practical portion of the Technica Proficiency Examination is required. This is a performance test.

61. Spring Program, Vocational or Occupational Type B

A 17-month program of teacher education leading to the Vocationa Certificate, Type B or the Occupational Certificate, Type B (Practica Subjects), to begin April 1, 1974.

Admission requirements:

In addition to meeting the admission requirements of the Technical an Industrial Arts Department, an applicant must have the assurance fro a board of education of an appropriate teaching position in a secondar school, commencing in September of the following year, and have th approval of the Ministry of Education.

The program has three components:

1 a session extending from April 1 to August 16, 1974, composed of 1 in-Faculty weeks and 5 weeks of practice teaching;

2 a one-year, supervised internship in an Ontario school, during whic he may obtain credit for a further six weeks of practice teaching;

3 a six-week session extending from July 2 to August 8, 1975. Candi dates who successfully complete this three-part program will be recom mended for the Vocational Certificate, Type B, or the Occupationa Certificate, Type B (Practical Subjects).

62. Vocational or Occupational Certificate, Type A

Admission requirements:

This program is offered to graduates of a faculty of applied science or faculty of architecture or graduates holding the B.SC.N. degree from recognized university, with at least 70% or B, whichever is higher, in th

final and one other year. An applicant must submit evidence of not less than two years of approved wage-earning experience in the field of his major subject.

Each candidate must take the courses of the program for the Type B Certificate, and must obtain a minimum standing of B.

The candidate must take additional courses in the organization, administration, and supervision of vocational schools, educational measurements, curriculum development, comparative education, and philosophy of education.

3. Program for the Vocational Occupational ficate, Type B

The program consists of five parts:

Part I Teaching Subjects

All candidates will take the following courses:
Methods of Teaching the Technical and Industrial Arts 702
Principles and Practices of Technical and Occupational Education 703 (for Vocational/Occupational students only)
Principles and Practices of Industrial Arts Education 704 (for Industrial Arts students only)

Part II Educational Theory

All candidates will take the following courses:
Structural and Legal Bases of the Ontario School System 201
Curriculum Development for Technical-Occupational Subjects 701
Educational Psychology as it applies to Technical Education 706
History and Philosophy of Technical Education 708

Part III Professional Practice

Observation and Practice Teaching is a ten-week program, conducted in secondary schools, outside as well as within the area of Metropolitan Toronto.

Candidates entering the course must be willing to accept practice teaching assignments to those schools selected by the Department of Practice Teaching. A candidate absent during regular practice teaching weeks may be required to make up the deficiency at the end of the session.

Part IV Additional Related Courses

a All candidates will take the following courses:
English for Technical and Occupational Candidates 707
Technical Workshop 713

b In addition, a candidate must elect one course from the following:
Introduction to Special Education 711
Mathematics 712

Part V Technical Proficiency Examination

Theory 720

Each applicant will be required to pass a written examination designed to test his attainments as a skilled worker in the subject concerned. The examination will be on the fundamental principles, operations, processes, and skills of the subject.

64. One-Year Session Leading to the Bachelor of Education Degree

To this program may be admitted an applicant who holds an approved degree in engineering, architecture, nursing, arts or science from a recognized university. Successful candidates with Canadian citizenship or Landed Immigrant status will be recommended to the Ontario Ministry of Education for the Vocational Certificate, Type B, or the Occupational Certificate, Type B (Practical Subjects).

The program consists of five parts:

Part I Teaching Subjects
As in Section 63, Part I.

Part II Educational Theory
a All candidates will take the following courses:
Structural and Legal Bases of the Ontario School System 201
Curriculum Development for Technical–Occupational Education 701
b In addition, a candidate must elect two courses from those offered in Section 21, Part II (b).

Part III Professional Practice
As in Section 63, Part III.

Part IV Additional Related Courses
A candidate must elect one course from Section 21, Part IV.

Part V Technical Proficiency Examination
As in Section 63, Part V.

Details of Courses in the Program for the Vocational or Occupational Certificate, Type B

NOTE: In each case, the numeral in brackets indicates the number of lecture hours per week.

dministration and Program Development

201 *The Structural and Legal Bases of the Ontario School System* (1 hour). The organization of provincial and local systems of education; powers and duties of the various educational authorities; the Education Acts and Regulations of the Province of Ontario; professional aspects of teaching.

Educational Psychology

706 *Educational Psychology as it applies to Technical Education* (3 hours). An introductory course designed for teachers of the Technical and Industrial Arts. As such, special reference is given to the application of educational psychology to teaching and learning as applied to practical subjects.

Areas explored include development and adjustment, motivation, intelligence and its measurement, and the learning process with stress on motor learning. Theoretical approaches are examined in terms of their practical applications.

History and hilosophy of Technical Education

708 *History and Philosophy of Technical Education* (2 hours). Designed to acquaint the student with the historical development of education and the philosophical concepts which underly it. The topics are set forth to show the vocational aspects of educational developments from the ancient world to the present and to reflect the theories and practices of education as advocated by such thinkers as Plato, Comenius, Rousseau, Locke, Pestalozzi, Fellenberg, Della Vos, Seath, Dewey and Whitehead.

Stress will be placed on the influence of these philosophers on current vocational practice so that a proper perspective may be gained as we examine the various facets of general educational practice.

8. Teaching Subjects

702 *Methods of Teaching the Technical and Industrial Arts* (4 hours). An introduction to the methodology of teaching skills, concepts, and habits within technical and industrial arts facilities. The course is highly practical in nature with the overall purpose of fostering creativity, inductive and deductive reasoning, and problem solving. The writing of behavioural objectives, lesson planning, analysis of formal lesson types, and ways of maximizing the effectiveness of individual and small group

instruction will be applied in a practice teaching workshop and in micro teaching. Instruction and practice will be given in the preparation o instructional materials, and in methods of testing and evaluating pe formance.

703 *Principles and Practices of Technical and Occupational Educatio* (4 hours).
An introduction to the basic philosophy of technical education, relatin the concepts and generalizations of technical education to its role i general education; an examination of entering behaviours and learnin needs of students; a discussion of the facets of the teaching proces emphasizing the most effective and efficient methods. The course will b based on discussions, seminars and lectures.

69. Curriculum Development for Technical-Occupational Education

701 *Curriculum Development for Technical-Occupational Educatio* (2 hours). A course consisting of four separate assignments: Subjec Analysis; Course of Study; Model Shop Plan; Equipment List an Budget.
Subject analysis involving organization of the candidate's teachin subject into blocks and later into practical and theoretical lessons; uni modular, and cluster courses of study designed to satisfy the needs o today's high school student; emphasis on design and planning of teach ing areas; methods of ordering and purchasing supplies and majo equipment; the preparation of an expendable supply budget and sampl orders for some major equipment.

70. Additional Related Courses

707 *English for Technical and Occupational Candidates* (3 hours *Rhetoric and Semantics* (2 hours)

RHETORIC:
Methods and patterns of clear and effective writing; relationship be tween thinking and the composition process; perceptive seeing; rhetor cal considerations in the composition of sentences, paragraphs, an essays; characteristics and techniques of effective identificatio definition, comparison and contrast, classification, and illustratio three types of analysis: functional, process, and causal.

SEMANTICS:
Representative subjects of investigation: codes and levels of speec problems with definitions; relationship between abstraction, thoug and action; the uses of language – both verbal and non-verbal – popular culture, advertising, mass media, news gathering, religion ar prayer, science, and education.

ORAL ENGLISH: (1 hour)
Fundamentals of voice control; oral reading; structure of speech; pre aration of presentation of formal speeches; presentation of impromp speeches.
Before beginning this course, some preparation may be advisable f candidates who lack command of basic English structure.

711 *Introduction to Special Education* (2 hours). A preparation for teaching 'non academic' students, which includes philosophy, methodology and management of the various types of programs in the public school system, as well as psychology and mental health relating to slower learners.

712 *Mathematics* (2 hours). A course designed to acquaint the students with mathematics as taught at the secondary level, including a *core* of topics involving operations with fractions and decimals, the solution of linear equalities and inequalities, formulae, ratio and proportion, powers and roots; and *elective* topics chosen from trigonometry, problem solving, the slide rule, estimation and scientific notation, mathematical structure, relations and graphs, calculus.

713 *Technical Workshop* (3 hours). An opportunity for technical and occupational student teachers to broaden and upgrade their knowledge and skills in the teaching subject area in which they will be certified or in a related teaching subject area.

(B) Industrial Arts Programs

71. Industrial Arts Certificates

Candidates with suitable academic standing, a basic Ontario teachin certificate, or equivalent, may enter a one-year program leading to a Industrial Arts Certificate.

Intermediate Industrial Arts Certificate
The Intermediate Industrial Arts Certificate qualifies the holder for fiv years as a full-time teacher of Industrial Arts in all divisions of elemen tary and secondary schools.
A Permanent Intermediate Certificate may be requested of the Ministr of Education upon completion of two years' successful experience in a elementary or secondary school in Ontario.

Specialist Industrial Arts Certificate
The Specialist Industrial Arts Certificate provides advanced study an certification. It is valid for five years. The holder may ask the Ministry o Education for a Permanent Specialist Industrial Arts Certificate upo the completion of two years' successful experience in Ontario in Indus trial Arts teaching.

72. General Conditions of Admission

An applicant for admission to the one-year program for certificates i Industrial Arts must make application, not later than August 15, to th Director of the Department of Technical and Industrial Arts, on a for to be obtained from him, and shall submit with the application:

1 *A birth certificate*. If not born in Canada, the applicant must submit certificate from a competent authority that he is a Canadian citizen or ha Landed Immigrant status.
2 Evidence of a negative tuberculin test reading or chest x-ray take within the year preceding September 16, 1974.

73. Intermediate Certificate

Candidates with suitable academic standing and an Ontario Elementary High School Assistant's or Vocational Teaching Certificate, or equiva ent, may enter a one-year program leading to an Industrial Ar Certificate.

NOTE:
Each teacher of Industrial Arts in an elementary school must hold a Elementary School Teacher's Certificate in addition to his Industri Arts Certificate.

If there are enough applicants, a special half-year course beginning in January will be offered to those who have successfully completed Parts I and II of the Elementary Industrial Arts summer program with a minimum standing of B in Part II.
In all cases, candidates who do not have the required B standing are required to complete the one-year program leading to the Intermediate Certificate in Industrial Arts.

The program consists of three parts:

Part I Teaching Subjects
A candidate must elect the following teaching subjects:
Material Science 632
Design Technology 640
Design Environment 645
Fabrication and Production 650

Part II Educational Theory
A candidate must elect the following subjects:
Curriculum Development 630
Philosophy 634

Part III Professional Practice
Since each candidate enters the program with a teaching certificate, he is given only three weeks in a practice school. His teaching progresses from individual and group instruction to complete charge of routine duties and class instruction. If possible, the candidate is sent to an Industrial Arts room in an elementary school, a junior high school, and a collegiate institute.

ng Program, ntermediate dustrial Arts

A program leading to the Intermediate Industrial Arts Certificate will be offered beginning in May, 1974.

Admission requirements:
Applicants with suitable academic standing must also hold
1 Occupational (Practical Subjects) or Vocational Teaching Certificate, or
2 an Ontario Elementary or High School Assistant's Certificate, or equivalent, and an Elementary Industrial Arts Certificate, or equivalent.

Program:
One session extending from May 13 to August 16, 1974. This is an extension of the program leading to the Elementary Industrial Arts Certificate, and will provide advanced experiences selected from the one-year program leading to the Intermediate Industrial Arts Certificate.

Candidates who successfully complete this program will be recommended for the Intermediate Industrial Arts Certificate.

5. Specialist Certificate

Admission requirements:
1 an Ontario Intermediate Certificate in Industrial Arts; and

2 at least one subsequent year's successful teaching in the field of Industrial Arts, as verified by the supervisory officer concerned; and
3 evidence of having obtained not fewer than seven Grade 13 credits or approved equivalents, including two in English or Français. It is recommended that the applicant include papers in Mathematics and Science.

The program consists of three parts:

Part I Teaching Subjects
A candidate must elect three of the following teaching subjects:

Architectural Drawing and Building Construction 660
Communications 661
Electricity Technology 662
Electronics Technology 663
Fabrication and Production (Junior Grades) 664
Foundation Design 665
Mechanics 666
Metal Fabrication and Production 667
Modern Materials 668
Plastics Fabrication and Production 669
Recreational Activities – Crafts 670
Recreational Activities – Outdoor 671
Science Technology 672
Wood Fabrication and Production 673

Part II Educational Theory
A candidate must elect three courses from this part. He may choose from those listed below and suitable course(s) from Section 21, Part II.

Special Topics in Creativity 123
Experience and Education 261
Comparative Education 680
Creativity and Problem Solving 681
Curriculum Development 682
Introduction to Research Techniques 684
Individual Research Project 686
Research Techniques 687
Comparative Education 750

Part III Professional Practice
Each candidate is given at least three weeks of practice teaching. The program is designed to satisfy the needs and interests of the individual candidate. Experimentation and the use of new methods are encouraged. The candidate is allowed to select the grade level for his practice teaching and, with the cooperation of the associate teacher, is given the opportunity to modify and evaluate the curriculum. A written assignment is also required.

Details of Courses in the Programs for the Intermediate Industrial Arts Certificate and the Specialist Industrial Arts Certificate

Intermediate

630 *Curriculum Development* (1 hour). A study of the problems involved in developing the program and environment for teaching Industrial Arts. Lecture and assignment.

640 *Design Technology* (6 hours). Electricity and Electronics: concepts, applications, power mechanics, and central control of electricity; methodology and teaching techniques. Lecture and laboratory. Mechanics: simple machines and applications, fluid power; basic physics as applied to mechanics; methodology and teaching techniques. Lecture and laboratory.

645 *Design Environment* (6 hours). Introduction to basic elements and principles of visual aspects of the environment, and the process of designing, recording and communicating ideas in two and three dimensions; methodology and teaching techniques. Lecture and laboratory.

650 *Fabrication and Production* (12 hours). The development of basic skills in the use of hand tools and machines, and in the handling of materials. Areas of study include the processing of natural and synthetic materials. Problem solving techniques are learned as the acquired skills are applied. Methodology and teaching techniques. Lecture and laboratory.

632 *Material Science* (2 hours). The study of the structure and properties of materials related to sources; production and use. Methodology and teaching techniques. Lecture and laboratory.

634 *Philosophy* (2 hours). Current educational thought: contemporary aims, problems, and practices in education, with particular reference to Industrial Arts education. The general purpose of the course will be to present a philosophical insight to help students appreciate modern educational issues. Lecture and seminar.

704 *Principles and Practices of Industrial Arts Education* (4 hours). Basic philosophy of Industrial Arts; effective and appropriate teaching methods, stressing problems peculiar to Industrial Arts areas; safety; techniques in the use of tools and machinery; integration with the total school program.

7. Specialist

660 *Architectural Drawing and Building Construction* (4 hours). An experimental approach to structures; a survey of current codes and practices of the construction industry; a study of the materials of

construction, their properties and use in modern construction with special attention to their effect upon architectural design; a group construction problem. Methodology and teaching techniques. Lecture and laboratory.

661 *Communications* (4 hours). Techniques of visual communication applied to the design process and teaching methods including technical drawing, sketching, photography and video. Methodology and teaching techniques. Lecture and assignment.

662 *Electricity Technology* (4 hours). Theory and test of devices such as motors, relays and solenoid valves. Such devices to be used with various sensors for heat, light, sound, pressure and strain. A study of automotive systems. Methodology and teaching techniques. Lecture and laboratory.

663 *Electronics Technology* (4 hours). Semi-conductor theory with experiments and application; the use of experimental kits which provide suitable classroom problems. Methodology and teaching techniques. Lecture and laboratory.

664 *Fabrication and Production – Junior Grades* (4 hours). Industrial Arts activities for younger children.

665 *Foundation Design* (4 hours). Concerned with the education of vision through the design process by exploring basic design concepts within the limitations of tools, materials and techniques. Methodology and teaching techniques. Lecture and laboratory.

666 *Mechanics* (4 hours). Study and application of power sources and mechanical devices. Methodology and teaching techniques. Lecture and laboratory.

667 *Metal Fabrication and Production* (4 hours). Advanced study of metals as materials of construction; metal structures; methods of forming, assembly and treatment; tooling for production; design approaches and application of theory and principles to a variety of metal fabrication fields. Methodology and teaching techniques. Lecture and laboratory.

668 *Modern Materials* (4 hours). Study of new materials and processes and their application in the Industrial Arts classroom. Lecture and laboratory.

669 *Plastics Fabrication and Production* (4 hours). Study of materials and means of production in greater depth applied to design fabrication problems. Methodology and teaching techniques. Lecture and laboratory.

670 *Recreational Activities – Crafts* (4 hours). Study of craft material and processes applicable to Industrial Arts teaching. Lecture and laboratory.

671 *Recreational Activities – Outdoors* (4 hours). Design, construction, and use of equipment related to outdoor recreation. Lecture and laboratory.

672 *Science Technology* (4 hours). Scientific principles applied in inventive construction cutting across activity boundaries. Methodology and teaching techniques. Lecture and laboratory.

673 *Wood Fabrication and Production* (4 hours). Advanced problems dealing with forming, fabrication and processing of wood and allied materials; machine methods with an orientation toward design for production on a limited production basis. Methodology and teaching techniques. Lecture and laboratory.

123 *Special Topics in Creativity* (2 hours). In-depth examination of the development of creativity through problem-solving, with opportunities for application.

261 *Experience and Education* (2 hours). (See Section 42)

680 *Comparative Education* (4 hours). An introduction to educational activities in other Canadian provinces and other countries; a comparison of various educational systems. Lecture and assignment.

681 *Creativity and Problem Solving* (4 hours). Psychology of problem solving; psychology of perception; stages in logical problem solving; system approach; problem solving as an educational strategy; creative technology. Lecture and seminar.

682 *Curriculum Development* (4 hours). The interaction of society and education; current curricular trends in Ontario education; dynamics of curriculum development. Lecture and assignment.

684 *Introduction to Research Techniques* (2 hours). Introduction to research techniques: purpose and rationale, sources of human knowledge, research and problem solving, e.g. definition of problem, related investigations, hypothesis, design of study, collection and evaluation of data, analysis of data, conclusion, report.

686 *Individual Research Project* (4 hours). A student who wishes to engage in an individual research project must obtain the approval of the Department before electing this course. He must have completed course 684 or show evidence of research skills appropriate to the area of study, and submit a brief proposal acceptable to the Department.

687 *Research Techniques* (2 hours). Discussion based on assignments completed in course 684. Research techniques; statistical analysis; techniques of reporting; formulation of conclusions. (Prerequisite: 684 or equivalent)

750 *Comparative Education* (2 hours). (See Section 100)

Recommendation of Vocational, Occupational and Industrial Arts Certificates

78. Final Standing

The final standing of students in attendance in the program for the Vocational Certificate, Type B, Occupational Certificate, Type B (Practical Subjects), or programs for the Intermediate and Specialist Certificates in Industrial Arts, will be determined by the sessional records of the respective programs. The sessional records in each program represent oral and written exercises, practical work, research reports, frequent tests, and the results of term and final examinations.

The standing of candidates will be determined by the combined results of term work and of the final examinations in the subjects of Parts I, II and IV, by the examination results of Part V, and by the record of Observation and Practice Teaching in Part III.

Standing in the subjects of Parts I, II and IV will be issued as follows: A 80–100, B 70–79, C 60–69, D 50–59, F below 50.

Final marks in any subject or for any Vocational, Occupational or Industrial Arts Certificate may not be issued until all assignments have been completed satisfactorily.

A student who obtains 50% in each of the courses in Parts I, II and IV and 50% assigned for Part III and for Part V, if applicable, may be recommended by the Council of the Faculty for the Vocational Certificate, Type B, or the Occupational Certificate, Type B (Practical Subjects) or the Intermediate or Specialist Industrial Arts Certificates. Candidates who complete the program under Section 64 may be recommended also for the Bachelor of Education degree by the Council of the Faculty.

A candidate who fails or withdraws from attendance in any program listed in this calendar may re-attend in a subsequent year, with the approval of the Council of the Faculty.

79. Performance Test

A candidate for the Intermediate Industrial Arts Certificate or the Specialist Industrial Arts Certificate must pass a performance test before being recommended for a certificate.

80. Technical Proficiency Examinations

A candidate for the Vocational or Occupational Certificate, Type B, must obtain at least 50% in each of the practical and theory portions of the appropriate Technical Proficiency Examinations.

Supplemental Privileges, Appeals, and ademic Rights of Students

A candidate for the Vocational or Occupational Certificate Type B (Practical Subjects) or the Intermediate or Specialist Certificate in Industrial Arts who passes in Part III (Observation and Practice Teaching) and fails in not more than two subjects of Parts I, II, and IV shall be exempted from further attendance. He may complete his standing for a certificate by re-writing, at an annual examination, the subject(s) in which he failed.

It is the responsibility of the student concerned to apply, not later than July 1, for permission to write the supplemental examinations in which standing is desired.

The statements about academic records and academic rights of students (Section 11), also apply to all candidates for Vocational, Occupational, and Industrial Arts Certificates.

82. Failure in lore Than Two Subjects

Candidates who fail in more than two subjects of Part I or Part II or in either division of Part III (Observation and Practice Teaching) will be required to attend and successfully complete another session as follows:

1 Candidates for Vocational, Occupational (Practical Subjects) or Industrial Arts Certificates shall attend the January–May session of the one-year program;

2 Candidates for the Vocational, or Occupational (Practical Subjects) Certificates, Type A or Specialist Industrial Arts who fail in two or more subjects will be required to repeat the session concerned.

83. Failure in Technical Proficiency Examinations

A candidate who obtains a standing below 50% in either the theory or practical examination may attempt a supplemental examination in June, 1975. Should he fail to obtain 50% in this supplemental examination he will be excluded from further professional training.

A candidate who attends the regular one-year program may attempt the theory examination in Technical Proficiency in the spring, 1975.

NOTE: As the value of an endowed scholarship or prize is dependent on the actual income of the fund, it is possible that the value of certain scholarships and prizes at the time of payment may be less than the amount stated in the calendar.

84. Ontario tudent Assistance Program/Canada tudent Loans Plan

Ontario Student Assistance Program/Canada Student Loans. The Canada Student Loans Plan was originally instituted by the Federal Government in 1964. The loan scheme was later integrated with provincial grants under the Ontario Student Awards Program. A student may apply for assistance under this Program to meet assessed educational costs when his own resources and/or those of his family are assessed as insufficient to enable him to pursue post-secondary education. The institution to which application is made will inform the student of the amount of aid granted in each case. Under the present program, if residency and other requirements are met, the first $800 of any award is Canada Student Loan and the balance is provided as Provincial grant. Borrowers under this Plan are required to repay the loan portion, but no principal or interest payments are required so long as the student is in full-time attendance at an eligible institution and for six months thereafter. For those qualifying for Canada Student Loan only, the maximum loan which may be advanced under this Plan to one student is $1,400 in one academic year. For those receiving a combination of loan and grant the award maximum is determined by actual educational costs. Application should be made to the Office of Student Awards, Simcoe Hall, University of Toronto. If the student qualifies for assistance, he will first receive a Certificate of Eligibility for the loan portion, authorizing him to make arrangements for the loan with any chartered bank or other approved lending institution. The grant portion of the award, if any, is normally paid in the second term, but if the total award is over $1,800, a portion of the grant money will be paid in the first term.

85. The William Pakenham Fellowship in Education

The late Dr. William Pakenham bequeathed to the University of Toronto the residue of his estate to be used as the governing body of the University may direct on behalf of the activities of the Faculty of Education.

Accordingly, a Fellowship in Education has been established for advanced work either in the University of Toronto or in some other

university approved by the Governing Council. The Fellowship shall be awarded at such intervals and have such value (usually $2,000) as the Governing Council on the recommendation of the Council of the Faculty of Education may from time to time determine.
Applicants must be residents of Ontario, holding a Bachelor's degree and a teacher's certificate valid in a Canadian province, and must submit a record of professional experience and evidence of ability to make a contribution to education in Canada as a result of further work.
An application form may be obtained from the Registrar, Faculty of Education. Completed applications must be received by March 15.

The Pakenham Memorial Prize

As a memorial to Dr. William Pakenham, Dean of The College of Education from 1907 to 1934, the teachers of Ontario have founded an annual Memorial Prize of the value of the interest on $1,000. The Prize will be in the form of books stamped with the Coat of Arms of the University of Toronto, and will be awarded to the student who obtains the highest standing, as reported in the annual returns of the Faculty, in the subjects of Parts I, II and IV of the High School Assistants' Program, Type B, and in Practice Teaching.

'. The Hugh W. 'yan Memorial Prize of The Ontario Secondary ıool Teachers' Federation

The Ontario Secondary School Teachers' Federation has founded an annual scholarship of the value of $100 in memory of a former President of the Federation, Dr. Hugh W. Bryan. The prize will be awarded by the Scholarship Committee of the Federation at the close of each session, and after receipt of a report from the Council of the Faculty of Education, to the student in regular attendance throughout the session in the High School Assistants' Program who has shown 'the most outstanding qualities of scholarship, teaching ability, and character.'

. International ess Machines ıanada Limited Scholarship

International Business Machines (IBM) Canada Limited has established a scholarship in the total amount of $200 to be awarded annually to one or more students registered in the Faculty of Education on the basis of participation and achievement in the Computer Studies Course. Application not required.

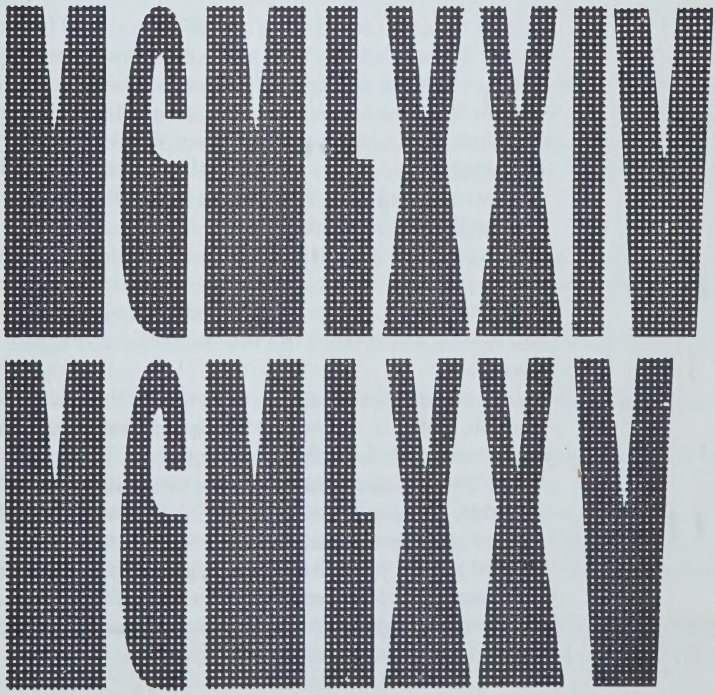
). The Morgan Parmenter morial Award in Counsellor Education

Established by Mrs. M. D. Parmenter and Mr. G. T. Parmenter as a memorial to Morgan D. Parmenter, Professor of Guidance, who founded the Guidance Centre in 1943 and was its Director until his death in 1968. This award is intended to recognize annually a student enrolled in the Counsellor Education Course in the one-year Bachelor of Education degree program and is based on scholarship, teaching ability and potential contribution to the development of guidance and counselling. The recipient of the award (value $400.) must satisfy the Dean and the Chairman that the funds will be devoted to furthering his or her education in this field by travel, study, or research.

Bursaries for nd-Language Teachers

Following the recommendation of the Royal Commission on Bilingualism and Biculturalism, the Federal Government is offering summer course bursaries for second-language teachers. This program is being

administered by the Provincial Government. Further information may be obtained from the Fellowship Section, Student Awards Branch, Ministry of Colleges and Universities, Mowat Block, 8th Floor, Queen's Park, Toronto, M7A 1C6 (965-3208).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Institute of Child Study

Inquiries concerning courses at the Institute of Child Study should be addressed to the Director's Office, Institute of Child Study, 45 Walmer Road, Toronto M5R 2X2.

91. Institute of Child Study

The Institute of Child Study is a centre for research with children, and for professional training in Early Childhood Education and Child Assessment and Counselling. There are approximately 70 students registered each year in the program leading to the Diploma in Child Study. The laboratory school, which operates from September to June, with an enrolment of 185 children ranging in age from 3 to 12 years, serves as a resource both for students in the Diploma program and for research activities of the students and staff.

The Institute was founded in 1926, as St. George's School for Child Study – the first university laboratory preschool in Canada. In 1939 this School became the Institute of Child Study and the first of the University of Toronto's numerous multi-disciplinary research centres. Originally, the work of the Institute was primarily devoted to research studies focusing on the preschool years. In 1953, the Institute's move to its present quarters at 45 Walmer Road permitted expansion of the laboratory school and of research and training activities to include children up to grade 6. Programs in infancy and family studies were also initiated about this time.

While graduate study through the Psychology Department had been a major element in the Institute's activities since its inception, the Institute's own one-year program leading to the Diploma in Child Study was first offered in 1944. In 1967 the program was extended to two years.

In its research and teaching activities, the Institute has maintained a realistic balance of interest in theoretical approaches and practical problems related to child development. The program is arranged to accommodate graduate students with a variety of undergraduate backgrounds. The academic program for all students includes courses concerned with basic theory and research, as well as courses directed toward the application of knowledge in child study. In 1971, the Institute became a constituent of the Faculty of Education. This has added a new emphasis to its program, combining psychological and educational issues in the study of children.

Qualified students may participate in the academic program of the Institute under one of the following arrangements:

1 Two-year program for students enrolled in Early Childhood Education or Child Assessment and Counselling.

2 One-year program for students with prior professional training and experience.

In special cases, a candidate may be allowed to take the two-year program in three years, or the one-year program in two years.

Occasional special students, not proceeding to the Diploma, may enrol in one or more courses with the approval of the instructor(s).

Course Requirements

A candidate must successfully complete ten full courses, including all courses prescribed, for the two-year program or five full courses for the one-year program.

A full course normally involves two hours per week of lectures throughout the academic year and, in some cases, field work.

NOTES:

1 In exceptional cases an occasional special student may be granted credit toward the Diploma for courses taken at the Institute within the two previous years.

2 A student may take one or more approved courses in another division of the University as part of his program.

Academic Requirement for Admission

A Bachelor's degree, with B standing, from a recognized university.

Enrolment Procedures

Application forms will be supplied by the Secretary of the Institute, on request. Enrolment is limited. Applications should be submitted as early as possible in the calendar year and not later than April 15. In the event that a space is not immediately available, an eligible applicant's name will be placed on the waiting list.

An applicant must submit with his application:

1 an official transcript of his complete university course, or an official transcript of his university work to date and a complete official transcript as soon as available,

2 an official statement of other academic or vocational courses, if applicable,

3 two references from persons familiar with his academic and professional pursuits,

4 evidence of a negative tuberculin skin test reading or chest x-ray taken within the year preceding September 11, 1974.

An interview will be required of each applicant unless distance makes this impossible, in which case his application may be considered on submitted records, and he will, if accepted, be interviewed at the time of registration.

For a candidate whose first language is other than English a requirement for admission may be the passing of the Communication Test for

Teaching in the English Language, administered by the Faculty. (See section 13)

Conditions for Final Standing

A student must complete all sections of his prescribed program with an overall B standing. Standings are based on assignments throughout the year and on participation in seminars, projects, and field practicum. If a student fails he may re-attend with the approval of the Council of the Faculty.

A student who wishes special consideration because of illness or other causes should make representation in writing to the Director before the close of the academic year.

Fees

The academic and incidental fees are to be paid according to instructions on the Fees Form supplied by the Secretary of the Institute before a registration card will be issued.

Academic fee	$520
Incidental fees	$ 46
Total fees (if paid in one instalment)	$566
First instalment (due September 10)	$370
Second instalment (due January 2)	$208
Special Students	
Academic fee, first subject	$104
Incidental fees	$ 26
Total fees (due September 10)	$130
Each additional subject	$104

A student who registers after the last date for normal registration will be required to pay a late registration fee of $10. An additional charge of $10 will be imposed for late payment of the second instalment of fees. On March 1 an additional 1% per month charge will apply.

Description of Programs

Early Childhood Education

Specialized study of the young child will include an overview of current preschool techniques, observation of and programming for individual children, and selected courses in the general field of child study. During the first year provision will be made for extensive practice in the Institute's school and in other centres. Second year students will be responsible for developing programs in the Institute's Preschool Division, and further practice will be arranged in areas of special interest to the student. Further specialization in infancy, or research in early childhood education, is possible as described below.

Students with professional training and prior experience in elementary or early childhood education who have been admitted to a one-year program will arrange a combined first and second year program in consultation with the co-ordinator of the Early Childhood Education Program.

FIRST YEAR:

020 Introduction to Early Childhood Education

023 Special Topics in Early Childhood Education
024 Teaching Practicum
One of:
021 Assessment of Young Children in Play and Educational Settings
022 Research Practicum in Early Childhood Education
Elective: equivalent of one full core course.

SECOND YEAR:
026 Programming for Young Children
027 Advanced Teaching Practicum
Electives: equivalent of three full courses, chosen from the core courses, course 021 or 022, research seminars, or appropriate courses elsewhere in the University.

Early Childhood Education–Infancy Specialization
Cognitive, emotional, and social development, and the implications of attachment, separation and deprivation in infancy will be studied, as a base for evaluating the strengths and weaknesses of current infant day care programs.
FIRST YEAR: required first year courses in the Early Childhood Education Program, except that Part B of course 023 may be omitted; Development in Infancy 004; and Infant Studies I 040.
SECOND YEAR: required second year courses in the Early Childhood Education Program; Infant Studies II 041; and two electives.

Early Childhood Education – Research Specialization
Students will be expected to complete one major piece of research in the second year of study. This may be done as part of a team of several students. Additional courses in research methodology elsewhere in the University may be selected.
FIRST YEAR: required courses in the Early Childhood Education Program and Research with Children 005. (Part B of 023 may be omitted or postponed to the second year in favour of an additional core course or research seminar if desired.)
SECOND YEAR: required courses in the Early Childhood Education Program; at least one research seminar; Research Practicum in Early Childhood Education 022 (if not chosen in first year); and one or two electives. One empirical study will be completed. Teaching practicum requirements in course 027 will be reduced.

d Assessment
d Counselling

In the first year, the student is introduced to theories and methods of assessing intellectual, emotional, and perceptual-motor functioning. Emphasis is on testing as a standardized method of making observations. Students participate in the counselling program of the Institute's laboratory school, as part of the teacher-counsellor team.
In the second year, the student is introduced to methods of interviewing children and adults, and the theories and techniques of therapeutic intervention. Opportunities are given for observation of and participa-

tion in interviewing and counselling. A placement of two days per week in a school or clinical setting is required in the second year to enable students to put into practice the theories and techniques studied.
This program may be combined with a specialization in infancy or research.

NOTE: Courses in this program are not open to occasional special students.

FIRST YEAR:
003 Group Processes and Family Life
030 Introduction to Assessment of Children
032 Practicum in Educational Programs and Counselling
Two Electives: equivalent of two full courses, at least one to be chosen from the core courses.

SECOND YEAR:
035 Special Topics in Childhood Assessment and Counselling
036 Theories of Counselling
037 Practicum in Assessment and Counselling
038 Behaviour Disorders of Childhood (half course)
039 Rorschach Analysis (half course)
Elective: equivalent of one full course, chosen from core courses, research seminars, or appropriate courses elsewhere in the University.

Assessment and Counselling – Infancy Specialization
FIRST YEAR: required first-year courses in the Child Assessment and Counselling Program; Development in Infancy 004; Infant Studies I 040; elective: at least one half course. Practicum will provide an opportunity to become familiar with infants and make use of developmental tests.
SECOND YEAR: required second year courses in the Child Assessment and Counselling Program; Infant Studies II 041. Opportunities will be provided for testing and assessment of both normal infants and those with disabilities.

Child Assessment and Counselling – Research Specialization
Students will participate in research practice in the second year of study, and will be expected to complete one major piece of research. (This may be done as part of a team of several students.) Additional courses in research methodology elsewhere in the University may be selected. Research practica will replace the Assessment and Counselling practicum.
FIRST YEAR: required courses in the Child Assessment and Counselling Program; Research with Children 005; and one elective.
SECOND YEAR: one major research practicum (including an empirical study) and up to three other electives, including at least one other Institute research seminar.

Core Courses

001 *Principles and Practices of Child Study.* A consideration of general principles of physical, motor, cognitive, emotional, social and personality development, and ways of identifying, implementing and evaluating those practices which support this development. Emphasis will be placed on examining methods and procedures used by parents and teachers in the socialization and education of children from infancy through adolescence. Consideration will be given to specific problem areas such as learning disabilities, speech defects, mental retardation, cultural and emotional deprivation, cultural conflict, delinquency, illness, psychosomatic disorders and emotional problems.

002 *Introduction to Child Development.* Designed for students with little or no background in psychology or child development. The readings will survey theoretical, empirical and methodological aspects of areas in developmental psychology such as cognition, learning, intelligence, language, motivation, perception and social-personal development.

003 *Group Processes and Family Life.* An examination of family life from the standpoint of small group theory and research. Socialization processes in the context of family life will be related to prospects for fostering social competence. Case material and live interviews with normal families will be used to provide students with an opportunity to analyze family interaction and plan remedial programs.

004 *Development in Infancy.* An examination of the development of children from birth to two years, with a view to understanding normal development and recognizing deviations from it. A study of the effects of prenatal influences, birth trauma, and postnatal experiences on later personality. An investigation of the research literature having a bearing on these factors. Observation of infants in various settings.

005 *Research with Children.* Students will be introduced to applied research with children through planning and conducting several small studies, as well as examining published research. Aspects of working with children in research settings: observation, construction of measures, and description of results will be illustrated.

006 *Theories of Human Development* (half course). An overview of major conceptual schemes in child development, personality, and socialization, with an opportunity for in-depth exploration of selected primary sources. Lectures provide explications followed by discussion of classic and current critiques. In addition to group seminars, individual tutorials may be arranged with the instructor.

007 *Personality Development and Socialization.* An examination of major critical developments characteristic of infancy through adolescence. Mental health aspects are considered in relation to personality development at various stages with the primary focus on the concept of security. Practice is provided in the administration and interpretation of personality tests for school-age children, with emphasis on the

Primary Form and Elementary Form of the Institute of Child Study Security Test.

008 *Cognitive Development* (half course). An investigation of the basic concepts in cognitive psychology, with emphasis on developmental aspects. (Required of first-year students in the Child Assessment and Counselling Program who have no previous courses in this area.)

009 *Language Development.* The first term will provide an overview of issues in the field of language development, with emphasis on the relationship between the processes through which children acquire language and those involved in cognitive development. In the second term each student will select one area to be studied in depth and carry out a small research project. Open to students in the first or second year of both programs. Some previous study of psychology is a prerequisite. (The first term may be taken for half-course credit by permission of the instructor.)

010 *Physical, Physiological, Nutritional, and Perceptual-Motor Development* (half course). Seminar on physical and perceptual-motor development, including a study of research in the area, assessment, and programs affecting physical development. Field experience with assessment and programming will be provided.

011 *Programs in Special Education* (half course). The identification and examination of a variety of educational settings dealing with the intellectual, social and emotional development of children with learning disabilities. A number of current programs and methods used to facilitate the child's mental health will be considered in terms of the learning environment, parental adjustment, availability of community resources, and occupational possibilities.

Early Childhood Education

020 *Introduction to Early Childhood Education.* A general introduction to the study of young children, with emphasis on how children learn. (This course must be taken in conjunction with course 024.)

021 *Assessment of Young Children in Play and Educational Settings.* Includes observation, assessment, and individual educational planning for young children, with emphasis on the role of play in the child's development, and on the impact of handicaps.

022 *Research Practicum in Early Childhood Education.* (May be partly tutorial.) This course will involve projects on curriculum development, application and evaluation. These might grow out of student studies in curriculum areas or other problem areas in early childhood education.

023 *Special Topics in Early Childhood Education.* Seminars and workshops in which students will explore music, art, drama, movement and other physical development (Part A); and language, reading, science, and other quantitative skills (Part B). Students in the specializations in infancy or research may elect to take Part A only, for a half-course credit.

024 *Teaching Practicum.* Includes an average of twelve hours a week supervised practice teaching in the Institute's laboratory school and elsewhere. (This course must be taken in conjunction with course 020.)

026 *Programming for Young Children.* This seminar provides an opportunity for intensive study of programs for young children (e.g. Montessori, "traditional", direct teaching). These will be analyzed in the perspective of programs developed by students during the year.

027 *Advanced Teaching Practicum.* Includes an average of nine hours a week practice teaching, involving the development and implementation of an early childhood education program in the laboratory school, and also practice outside the laboratory school in a setting or settings chosen by the student. As part of this practicum a seminar is conducted on problems encountered, program development and implementation, parent participation, administrative issues and community resources.

l Assessment
d Counselling

030 *Introduction to the Assessment of Children.* An introduction, in seminars and practice, to theories and methods of assessing intellectual, emotional, and perceptual-motor functioning. The development of tests, what they measure, and their use and misuse are discussed. Stress is laid on testing as a standardized method of making observations. Students are trained to assemble information from different sources. Clear and effective report writing is emphasized.

032 *Practicum in Educational Programs and Counselling.* Participation in the teaching and counselling program of the laboratory school, with a view to becoming familiar with needs and requirements of children and teachers in the classroom; observations of classroom activities; report writing; examination of individual and group goals. Students will participate in a teacher-counsellor team that discusses problems and carries out remedial programs. A seminar is conducted in conjunction with the practicum.

035 *Special Topics in Child Assessment and Counselling.* Designed to enhance student listening and understanding skills in interviewing and counselling settings. It focuses on (i) critical analysis of key concepts such as defense mechanisms, counsellor values and insight; (ii) research findings on therapy outcomes and counsellor characteristics; and (iii) special areas such as the psychology of women, parenting the handicapped, and divorce. In addition, a laboratory in basic counselling skills is provided. Both tape-recorded and video-taped interviews are examined for the light they throw on such topics as the latent versus the manifest meaning of verbal language, planning a diagnostic intake interview, and process versus content in psychotherapy.

036 *Theories of Counselling.* Exploration of several theories of the counselling process. Gentle scepticism toward all will prevail. Efforts will be made to understand and account for the utilization of components of various theories in different field practice settings.

037 *Practicum in Assessment and Counselling.* Students will normally

spend two days a week in placement settings over an extended period of time. The number of different settings will vary with student interests and placement requirements. A seminar is conducted in conjunction with this practicum.

038 *Behaviour Disorders of Childhood* (half course). Various lecturers are invited to describe the nature of their specialized work with autistic, retarded, and schizophrenic children. Discussions emphasize the necessary handling skills in each case. The structure and function of several local treatment agencies are analyzed. The course instructor will attempt to integrate these presentations into a comprehensive survey of diagnosis and treatment of childhood disorders.

039 *Rorschach Analysis* (half course). Piotrowski's system of percept-analysis is used as a theoretical base for the scoring and interpretation of Rorschach protocols. The relationship between unconscious motivation and overt behaviour is discussed. Other scoring systems are introduced to enable the student to use the projective technique as a guide to clinical diagnosis and estimating prognosis in psychotherapy. This course includes practical training in the writing of personality evaluations based on Rorschach responses.

Infancy Specialization

040 *Infant Studies I* (half course). Seminars to discuss issues pertinent to infant development under a variety of conditions in homes and group care. Students enrolled in Early Childhood Education will have some practicum in infant day care centres and this will provide a basis for evaluating a variety of child care practices. Students enrolled in Child Assessment and Counselling will explore the information about infant developmental tests, and have an opportunity to use one of the current tests. Required of first-year students in either program specializing in infancy.

041 *Infant Studies II.* Seminar will cover research findings on cognitive, language, social, emotional and intellectual development. Students will present papers on specialized topics for discussion and critical evaluation. Further practicum in both options is required and arranged. Required of second-year students in either program specializing in infancy.

earch Seminars and Practica

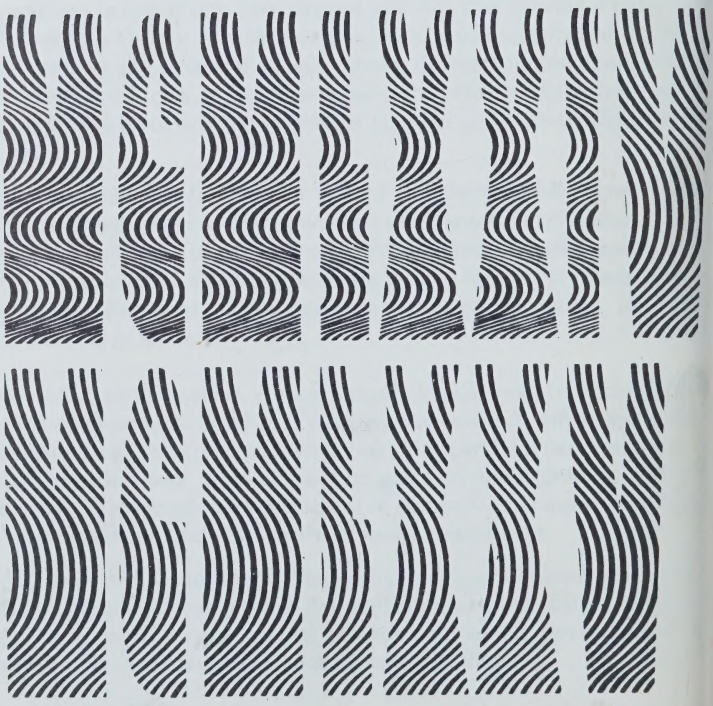
050 *Social Development.* A social-psychological analysis of children's social relationships. Small group theory and research will be applied to such topics as self concept, role taking, interpersonal perception, and moral development. Students will be given an opportunity to involve themselves in research on the nature of competition, cooperation, and collaboration and the assessment of social competence.

051 *Day Care Environments and the Growth of Competence.* A research practicum concerning the application to day care centres of recent research on the role of environment in the development of competence, with emphasis on programs for infants.

052 *Semantic Development and Cognitive Growth.* A survey of the recent research literature and an empirical study of those aspects of language development most closely related to cognitive development, logical thought and problem solving. This could include studies of current methods of assessing language development and studies attempting to isolate linguistic factors which may be confounding the results of intellectual tests of children. Open only to students with some background in language and cognitive development and a strong interest in research.

060 *Independent Study* (one half or one full course). Students may plan individual reading, field study, or research projects with members of the staff.

Students registered for their second year and students in the one-year program may arrange to take a course in the Department of Special Education at the Ontario Institute for Studies in Education. These courses concern various types of handicaps (physical, mental or emotional) as well as the education of gifted children.



2. High School Assistants' Type B Summer Program for Teachers with Professional Education

A summer program leading to the High School Assistant's Certificate, Type B, will be held from July 2 to August 9, 1974.

An applicant will be admitted who:

a holds a university degree approved for admission to the High School Assistants' Type B program,

b i holds an Ontario Interim Elementary School Teacher's Certificate, Standard Four, or

ii holds a Permanent Elementary School Teacher's Certificate, Standard Four, and does not have a contract with a secondary school board, or

iii holds an acceptable teaching certificate other than **i** or **ii** above, or

iv is eligible for a secondary school Letter of Standing but wishes to familiarize himself with the Ontario school system, or

v failed in a one-year program of a Faculty or College of Education but has been given permission by the Council of the Faculty to attend this course to make up a deficiency.

c submits evidence of a negative tuberculin test reading or chest x-ray taken within the year preceding July 2, 1974.

The program will consist of offerings from the following Departments:

Administration and Program Development
Educational Psychology
History, Philosophy and Sociology of Education
and an appropriate pattern of two secondary school subjects from the following (See Section 21 for prerequisites):

Art
Business Education
Computer Studies
Dramatic Arts
English
French
Geography
History
Home Economics
Latin
Mathematics
Physical and Health Education

Psychology and Sociology
Science

93. High School Assistants' Type A Seminars

Summer Seminars leading to the following High School Assistant's Certificates, Type A, alone or in combination, will be offered from July 2 to August 9, 1974 (subject to sufficient registration):

Anthropology
Art
Biology
Chemistry
Dramatic Arts
Economics
English
French
Geography
German
Greek
History
Latin
Mathematics
Music
Physical and Health Education
Physics
Political Science
Psychology
Russian
Science
Sociology

Admission requirements:
1 a High School Assistant's Certificate,
2 the academic requirement as prescribed in the Ministry of Education Memorandum 1970–71:51. (Transcripts will be evaluated by the Office of Advanced Standing of the Faculty of Education.)
NOTE: If necessary to limit enrolment, preference will be given to candidates who hold Permanent Certificates.
Application for enrolment must be made to the Registrar, Faculty of Education, not later than May 1, 1974.

94. Business Education

Teachers who wish to enrol in any of the following Summer Sessions should write for application forms to the Principal, Business Education Summer Courses, Faculty of Education, and should submit the completed form not later than April 15, 1974.
Summer Sessions leading to Part I, Part II and Specialist in Accountancy, Data Processing, Marketing, or Secretarial will be held at Central High School of Commerce, Toronto, for candidates who hold a High School Assistant's Certificate. Candidates with Elementary School Teacher's Certificates may also attend the Intermediate courses.

Examinations upplementals

Examination centres:

a Examinations in the non-machine subjects will be held on April 20, 1974, at the Faculty of Education and, if sufficient candidates apply, at Thunder Bay, Sault Ste. Marie, North Bay, Ottawa and Windsor only.

b Examinations in the machine subjects will be held on April 27, 1974, at the Faculty of Education and, if sufficient candidates apply, at Thunder Bay, Sault Ste. Marie, North Bay, Ottawa and Windsor only.

Permission to write will be based on the requirements listed below. Requests to write the examinations should be made to the Principal, Business Education Summer Courses, before March 1, in the year of writing. The timetable of examinations will be mailed to a candidate when his application is accepted.

Supplemental examinations:

A candidate who has failed to obtain standing in the Principles and Practices of Teaching a Business Education subject at a previous session may try the supplemental examination at the end of the Summer Session.

Requirements for writing examinations:

A candidate may write an examination when

a Intermediate Part I or II Faculty correspondence courses have been successfully completed; or

b Intermediate Part I or II subjects have been taught by the candidate for two years within the last three years, as certified by the Principal, or

c official evidence is presented of the successful completion of Intermediate Part I or II subjects at a night school course, secondary school option course, a business college course, or an approved machine company course.

. Counsellor Education

The Program, which consists of four parts, leads to the Specialist Certificate in Guidance, and will be offered from July 2 to August 2, 1974.

ADMISSION REQUIREMENTS

Part I

a a certificate qualifying the candidate to teach in an elementary or secondary school in Ontario;

b evidence of at least one year of successful teaching experience in Ontario, as certified by a supervisory officer.

Part II

Part I of the Counsellor Education Program.

Part III

a Part II of the Counsellor Education Program;

b evidence, certified by a supervisory officer, of one year's successful teaching experience in Ontario, including at least 180 hours of successful guidance and counselling; or a letter from a supervisory officer attesting to the candidate's suitability for further training in counsellor

education following completion of Part II of the Counsellor Education Program.

Part IV
Part III of the Counsellor Education Program.

Advanced Standing
Exemption from one or more courses leading to an advanced certificate may be requested upon submission of:
a transcripts of graduate courses in guidance and/or counselling,
b evidence of at least one year of successful teaching experience in Ontario, as certified by a supervisory officer.

Admission
Completed application forms must be returned, with necessary documents, not later than April 15, 1974, to the Principal, Summer Courses in Counsellor Education, Faculty of Education.

PROFESSIONAL DEVELOPMENT
Counsellors, administrators and others who hold an Ontario Specialist Certificate in Guidance, or its equivalent, are encouraged to return for further course work in order to maintain their skills at optimum level. The Counsellor Education Department is prepared to create special timetables for those who wish to update their professional skills. Further information on the courses is available from the Principal.

97. Dramatic Arts

Three six-week summer sessions lead to the Specialist Certificate in Dramatic Arts. The first and second summer sessions lead to letters of success indicating successful completion of Parts I and II of the program. The third summer session leads to the Specialist Certificate in Dramatic Arts.
Each course will be offered at either the Foundation or Advanced level or at both levels. Normally, candidates are free to select any three courses for credit toward the Specialist Certificate. Details and application forms may be obtained from the Principal, Summer School Program, Dramatic Arts Department, Faculty of Education. Applications must be submitted not later than May 10, 1974.

98. Home Economics

A course leading to the Intermediate Certificate in Home Economics will be given from July 2 to August 9, 1974. Admission requirements are an Elementary School Teacher's Certificate and evidence of successful completion of five approved university courses in Home Economics with a standing not lower than 60% or C, whichever is higher. Beginning in 1974, candidates who have not already started on an approved program of the university courses in Home Economics will be required to have a university degree including the Home Economics courses, before admission to this summer course. This course is given only when a sufficient number of candidates apply.
Applications must be submitted not later than May 10, 1974, to the Principal, Home Economics Summer Courses, Faculty of Education.

99. Physical and Health Education

Intermediate Summer Sessions (Secondary School Teachers)
The program leading to an Intermediate Certificate in Physical and Health Education consists of two Summer Sessions (Intermediate, Parts I and II). These will be held from July 2 to August 9, 1974. Applicants for admission to the Summer Sessions must hold a High School Assistant's Certificate.

Specialist Summer Session (Secondary School Teachers)
The Summer Session leading to the Specialist Certificate will be held from July 2 to August 9, 1974.
Applicants for admission must hold a High School Assistant's Certificate and an Intermediate Certificate in Physical and Health Education, and have taught for a period of at least one year in a secondary school in Ontario, or in Grade 9 or 10 of an elementary school or a separate school in Ontario, or hold a High School Assistant's Certificate and a Supervisor's Certificate in Physical and Health Education.

Applications
Application forms may be obtained from the Chairman of Women's Physical and Health Education, or from the Chairman of Men's Physical and Health Education, Faculty of Education. Completed application forms must be returned not later than April 15, 1974.

Summer Courses for Elementary School Teachers
The following courses leading to the appropriate Ministry of Education certificates will be offered by the Physical and Health Education Departments (Men and Women), July 2 to August 2, 1974.

1 *Elementary, Type B.* Admission requirement: a certificate or Letter of Standing qualifying the applicant to teach in an elementary school in Ontario.
2 *Intermediate, Type B, Part I.* Admission requirement: completion of the Elementary, Type B course or its equivalent.
3 *Intermediate, Type B, Part II.* Admission requirement: completion of Part I of the Intermediate, Type B course.
4 *Supervisor's Course.* Admission requirement: an Intermediate Certificate in Physical and Health Education, Type B, and at least five years' approved teaching experience.
Further information and application forms may be obtained from the Chairman, Physical and Health Education Department (Men's), Faculty of Education. Applications must be submitted not later than April 15, 1974.

Medical Certificates
Each applicant is required to forward by June 15 a medical certificate from his own physician indicating that he is physically fit to take a summer session in Physical and Health Education. Applications will not be finally accepted until this condition has been fulfilled.

VOCATIONAL/OCCUPATIONAL (PRACTICAL SUBJECTS), TYPE B, SUMMER PROGRAM FOR TEACHERS WITH PROFESSIONAL EDUCATION

Courses leading to the Vocational or Occupational Certificate (Practical Subjects), Type B, will be offered from July 2 to August 16, 1974, for holders of a Permanent High School Assistant's Certificate (or of equivalent qualifications meeting Ministry of Education requirements for Vocational Certification) who have an assignment to teach a vocational-technical course.

The program consists of three parts:
Part I – *Teaching Subjects*
All candidates will take selected topics from the courses:
Methods of Teaching the Technical and Industrial Arts 702
Principles and Practices of Technical Education 703

Part II – *Educational Theory*
Structural and Legal Bases of the Ontario School System 201
Curriculum Development for Technical-Occupational Education 701
Educational Psychology as it applies to Technical Education 706

Part III – *Technical Proficiency Examination*
Theory 720
Each applicant shall be required to pass written examinations designed to test his attainments as a skilled worker in the subject concerned. The examinations shall be on the fundamental principles, operations, processes, and skills of the subject.

SUPPLEMENTARY VOCATIONAL SCHOOL TEACHER'S CERTIFICATE

A summer program will be offered from July 2 to August 2, 1974 in a number of subject areas leading to the Supplementary Vocational School Teacher's Certificate (subject named), valid for not more than one-half of a teacher's full-time teaching schedule at the intermediate level of a secondary school.

Admission requirement:
An Interim or Permanent Vocational Certificate, Type B, in the same technological cluster as that of the subject for which application is being made. An applicant whose certificates do not meet this criterion may also be admitted if sufficient background can be proven in the second subject area. Further details are available from the Director, Technical and Industrial Arts Department.

The program has three components:
1 a 125-hour course in the theory and practical applications of the vocational subject.
2 a 25-hour course, "Constructing an Innovative Program", to develop competence in designing course modules or complete programs based on transfer and integration of new knowledge.

3 Technical Proficiency Examinations: written and practical examinations in the subject area as arranged by the Supervisor, Technical Proficiency Evaluation. Examinations will be held at the end of the program and will be based on the fundamental principles, operations, and skills of the subject at the intermediate level.

VOCATIONAL CERTIFICATE, TYPE A

A Program leading to the Vocational Certificate, Type A, will be offered in summer sessions from July 2 to August 2, 1974.

Admission requirements:
a a Permanent Vocational Certificate, Type B;
b confirmation from the supervisory officer concerned of at least two years of satisfactory teaching and fulfilment of the academic requirements outlined in the Ministry of Education memorandum 1967–68:30. A copy of this memorandum is available from the Faculty of Education.
The completing session will be open to a candidate who:
obtains standing in the initial session; or holds an approved four-year degree in Applied Science (B.SC., or B.A.SC.), Architecture (B.ARCH.) or Nursing (B.SC.N.), and an Interim Vocational Certificate Type B, and who submits a statement from the supervisory officer concerned that he has taught satisfactorily for a minimum of one year.

NOTE: A candidate in the latter category will take a special program.

Program of studies:
A candidate will complete six courses consisting of four Professional Development courses and two Technological or equivalent courses.

OCCUPATIONAL CERTIFICATE, TYPE A (PRACTICAL SUBJECTS)

The initial and completing summer sessions leading to the Occupational Certificate Type A (Practical Subjects) will be offered from July 2 to August 2, 1974.

Admission requirements:
a a Permanent Occupational Certificate, Type B (Practical Subjects);
b confirmation from the supervisory officer concerned of at least two years of satisfactory teaching, and fulfilment of the academic requirements outlined in the Ministry of Education memorandum 1967–68:30. A copy of this memorandum is available from the Faculty of Education.
The completing course will be open to a candidate who obtains standing in the initial session.

PROFESSIONAL DEVELOPMENT COURSES

Vocational, Type A: 750, 751, 752, 753, 758, 759
Occupational, Type A: 750, 753, 755, 756, 757, 758, 794, 795

750 *Comparative Education*
An introduction to education in other Canadian provinces and other countries, providing a framework for comparision with the Ontario system. An examination of the similarities and differences currently exhibited by the educational systems in Canada, the United States, the United Kingdom and Russia will focus on such major topics as tradition, social change, resources, constitutions, nationalism, selection of elites, urbanization and technology.

751 *Curriculum Development*
An examination of the theory of curriculum development in the field of vocational education through an analysis of individual and group behaviour, using Getzels' social role model as a basis for the study, and the effects upon the schools of current plans for curriculum development by local groups and the Ministry of Education. Topics include definitions of curriculum, influences affecting curriculum designs, and evaluation of curriculum.

752 *Test Construction and Educational Measurement*
The first part of this course provides opportunities for teachers to practice construction of valid and reliable testing instruments for use in classroom practice. The second part uses basic statistical techniques to clarify and evaluate results obtained in classroom test situations.

753 *Philosophy of Education*
An attempt to answer the question "What are the proper aims of education?" by examining the basic metaphysical, moral and political issues through a study of selected readings by such thinkers as Plato, Locke, Rousseau, Kant, Dewey, Whitehead, Russell, Maritain and Hook.

755 *Problems in Special Education*
An exploration of the origin of and solutions for philosophical attitudes and managerial methods contributing to school-oriented problems peculiar to the practical subject areas of the school system. Discussion topics are largely based upon experiences provided by class members.

756 *Society and the School*
An exploration of the role of the school as an agent of modern society and its functions in the development of youth based on the interaction of varying cultures, moral standards and attitudes of different cultural and socio-economic groups.

757 *Mental Health and Hygiene*
A course based on the premise that sound mental health is necessary to successful progress in education. A study will be made of the effects on the learning processes of students by factors such as behaviour

mechanisms, social influences on personality and adjustments to varied situations.

758 *Supervision*
An introductory course for teachers who wish to acquire a greater awareness of the characteristics, skills and trends of supervisory relationships. Leadership, human relations, individual and group behaviour, organizational goals, efficiency, and communication will be discussed.

759 *Administration*
A study of the administrative functions within the secondary school system of Ontario. School administration, organization, timetabling, problem solving, decision making, as well as personnel selection, development and effectiveness will be discussed.

794 *Special Education I*

795 *Special Education II*

TECHNOLOGICAL COURSES

Vocational and Occupational, Type A

Electrical and Electronics I 770
Electrical and Electronics II 771
Fashion and Design I 772
Fashion and Design II 773
Fluid Power I 774
Fluid Power II 775
Fluid Power III 776
Graphic Arts I 777
Graphic Arts II 778
Mathematics I 779
Mathematics II 780
Mechanical Technology and Engineering Science I 781
Machine Tool and Workshop Technology II 782
Thermal Engineering II 783
Advanced Welding II 784
Machine Design II 785
Engineering Graphics II 786
Vocational Art I 787
Vocational Art II 788
Wood Technology I 789
Wood Technology II 790
Wood Technology III 791
Special Education I 794
Special Education II 795
Photography 796
Automotive Technology 797

NOTE:
Applications must be received not later than May 10, 1974, for any

Vocational or Occupational Summer Session mentioned above. Application should be made to the Director, Technical and Industrial Arts Department, Faculty of Education.

101. Industrial Arts Elementary Certificate

Part I and Part II of the two-summer program leading to the Elementary Certificate in Industrial Arts will be offered from July 2 to August 16, 1974.

Admission requirements:

1 a certificate or a Letter of Standing qualifying the applicant to teach in an elementary or secondary school in Ontario.

2 successful completion of Part I admits to Part II.

NOTE:

A candidate admitted on a Letter of Standing may not be issued a certificate until he holds a basic Ontario teaching certificate.

Program:

Part I	Part II
Design Technology I 600	Design Technology II 601
Design Environment I 602	Design Environment II 603
Fabrication and Production I 604	Fabrication and Production II 605
Material Science I 606	Material Science II 607
Curriculum Development I 608	Curriculum Development II 609
Philosophy I 610	Philosophy II 611
Administration I 612	Administration II 613

Details of Courses

600 *Design Technology 1*

Electricity: Introduction to sources, characteristics, measurement, and control of electricity; methodology and teaching techniques. Lecture and laboratory.

Mechanics: An introduction to the sources, transfer, and control of power; methodology and teaching techniques. Lecture and laboratory.

601 *Design Technology 2*

Electricity: Application of electrical principles in home, school, and industry; methodology and teaching techniques. Lecture and laboratory.

Mechanics: Application of mechanical principles through problem solving; methodology and teaching techniques. Lecture and laboratory.

602 *Design Environment 1*

Design foundation: structural basis of form – line, plane, mass; methodology and teaching techniques. Lecture and laboratory.

Communication: descriptive drawing, sketching, and photography as a means of observation; recording and communication of individual perceptions; methodology and teaching techniques. Lecture and laboratory.

603 *Design Environment 2*
Design foundation: Application of the elements of structure – line, sheet, solids, modules; methodology and teaching techniques. Lecture and laboratory.
Communication: Further development of principles of communication through drawing and presentation, technical drawing, and photography; methodology and teaching techniques. Lecture and laboratory.

604 *Fabrication and Production 1*
The development of basic skills in the use of hand tools and machines for the elementary grade levels utilizing natural and synthetic materials; methodology and teaching techniques. Lecture and laboratory.

605 *Fabrication and Production 2*
Further development of basic skills in the use of hand tools and machines for the elementary grade levels through a problem-solving approach; methodology and teaching techniques. Lecture and laboratory.

606 *Material Science 1*
The study of the structure and properties of natural and synthetic materials. Methodology and teaching techniques. Lecture and laboratory.

607 *Material Science 2*
Further study of the structure and properties of natural and synthetic materials; methodology and teaching techniques. Lecture and laboratory.

608 *Curriculum Development 1*
Investigation, interpretation, and implementation of current Industrial Arts programs for the elementary level. Lecture and assignment.

609 *Curriculum Development 2*
A study of the factors involved in the development of an appropriate elementary Industrial Arts program. Lecture and assignment.

610 *Philosophy 1*
Part I of a study of contemporary aims, problems and practices in Industrial Arts education at the elementary level. Lecture and seminar.

611 *Philosophy 2*
Part II of a study of contemporary aims, problems and practices in Industrial Arts education at the elementary level. Lecture and seminar.

612 *Administration 1*
Principles of classroom management relating to records, equipment, supplies, housekeeping, and safety. Lecture and seminar.

613 *Administration 2*
Examination of administrative problems relating to management of budget, equipment, supplies, and records. Lecture and seminar.

2. Industrial Arts, Specialist Certificate

Part I, Part II, and Part III of the three-summer program leading to the Specialist Industrial Arts Certificate will be offered from July 2 to August 2, 1974.

Admission requirements:

a an Intermediate Industrial Arts Certificate with an average of B standing in the Intermediate Industrial Arts program,

b one year's successful teaching of Industrial Arts subsequent to obtaining the Intermediate Certificate as confirmed by the supervisory officer concerned,

c seven Grade 13 credits (two of which must be English or Français), or equivalent, as approved by the Faculty.

To Part II may be admitted a candidate who has passed Part I.
To Part III may be admitted a candidate who has passed Part II.

Program:

Part I
One of the teaching subjects listed below, and two of the Educational Theory courses listed below.

Part II
One of the teaching subjects listed below, and two of the Educational Theory courses listed below other than those selected in Part I.

Part III
One of the teaching subjects listed below, and two of the Educational Theory courses listed below other than those selected in Parts I and II.

Teaching Subjects

Architectural Drawing and Building Construction 660
Communications 661
Electricity Technology 662
Electronics Technology 663
Fabrication and Production – Junior Grades 664
Foundation Design 665
Mechanics 666
Metal Fabrication and Production 667
Modern Materials 668
Plastics Fabrication and Production 669
Recreational Activities – Crafts 670
Recreational Activities – Outdoors 671
Science Technology 672
Wood Fabrication and Production 673

Educational Theory

Special Topics in Creativity 123
Experience and Education 261
Comparative Education 750
Creativity and Problem Solving 681
Curriculum Development in Industrial Arts 682
Introduction to Research Techniques 684

Individual Research Project 686
Research Techniques 687

See descriptions of courses for full year programs, Section 77. Further information, and application forms may be obtained from The Director, Technical and Industrial Arts Department, Faculty of Education. Applications must be submitted not later than May 10, 1974.

. Occupational Trades

If there are enough applicants, a six-week program commencing July 2 and ending August 9 (two weeks for each subject) leading to the Occupational Certificate, Type B (Practical Subjects) will be offered in the following subjects: Care of the Sick and Family Care, Custodial Services, Electrical Appliances Repair, Food Preparation and Hygiene, Painting and Decorating, Personal Grooming, Retail Sales, Rough Carpentry, Service Station Operation, Sewing and Alterations, Small Engines, Trowel Trades, Waiter and Waitress Training, and Welding.

To this program may be admitted candidates who meet the general admission requirements, and in addition:

a hold an Elementary School Teacher's Certificate and have three years of related industrial experience, or

b hold an Elementary School Teacher's Certificate and an Intermediate Home Economics Certificate, or

c hold an Elementary School Teacher's Certificate and an Intermediate Industrial Arts Certificate, or

d hold a Vocational Certificate, Type B, or

e have standing in all professional courses leading to a Vocational Certificate, Type B, and not less than 40% average on the Technical Proficiency Examinations and have had approved practical experience in three occupational or service trade areas, and

f have a contract to teach Occupational (Practical Subjects) for the 1974–75 school year.

Before candidates for the above-mentioned program may be recommended for certification they must:

i pass three Technical Proficiency Examinations following the final summer program, and

ii submit acceptable Subject Analyses, Courses of Study, Shop Plans, and Equipment Lists.

NOTE: Candidates who do not have the necessary work experience will be required to take a second six-week program of practical subjects. To Part II may be admitted candidates who have completed Part I.

Attendance at mer Sessions

Owing to the compact nature of the Summer Sessions, absenteeism cannot be tolerated except for reasons of health and then only for a maximum of five days supported by a medical doctor's statement. This regulation applies to all candidates attending all Summer Sessions.

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The University of Toronto issues the following calendars and other publica concerning courses of instruction given by the University. Requests for calend information may be directed to the Office of Admissions of the University or Secretary of the particular Faculty, School or Institute.

ADMISSION INFORMATION—	Admission Awards
	Undergraduate Admission Handbook
	Undergraduate Admission Bulletin
APPLIED SCIENCE AND ENGINEERING—	Faculty of Applied Science and Engineering
	Engineering at Toronto—descriptive brochu
ARCHITECTURE—	Faculty of Architecture, Urban and Regiona Planning and Landscape Architecture
ARTS AND SCIENCE—	Faculty of Arts and Science— St. George Campus
	Scarborough College Calendar
	Erindale College Calendar
	Degree Programmes in College to enrol part-time students
	Diploma and Certificate Programmes in College to enrol part-time students
	Pre-University Courses
CONTINUING EDUCATION—	The School for Continuing Studies
DENTISTRY—	Faculty of Dentistry
	Division of Postgraduate Dental Education
	Division of Dental Hygiene
EDUCATION—	Faculty of Education
	Bachelor of Education in Extension
	Institute of Child Study
	Graduate Degrees in Education*
FOOD SCIENCES—	Faculty of Food Sciences
FORESTRY—	Faculty of Forestry
GRADUATE STUDIES—	School of Graduate Studies
HYGIENE—	School of Hygiene
LAW—	Faculty of Law
LIBRARY SCIENCE—	Faculty of Library Science
MANAGEMENT STUDIES—	Faculty of Management Studies
MEDICINE—	Faculty of Medicine, Medical Course
	Department of Rehabilitation Medicine
	Division of Postgraduate Medical Education
MUSIC	Faculty of Music
	Royal Conservatory of Music Year Book
NURSING—	Faculty of Nursing
PHARMACY—	Faculty of Pharmacy
PHYSICAL AND HEALTH EDUCATION—	School of Physical and Health Education
SOCIAL WORK—	Faculty of Social Work

*Write to: Ontario Institute for Studies in Education, 252 Bloor Street West, Tor Ontario, M5S 1V6.